

**NARRATIVE INQUIRY OF CHINESE AND AMERICAN
STUDENT TEACHERS' PROFESSIONAL IDENTITIES IN
THEIR TEACHING PRACTICUMS: A STORY CONSTELLATIONS
APPROACH**

A Dissertation

By

GANG ZHU

Submitted to the Office of Graduate and Professional Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Chair of Committee, Cheryl Craig
Committee Members, Hersh Waxman
Lynn M. Burlbaw
Hector Rivera
Head of Department, Michael de Miranda

August 2018

Major Subject: Curriculum and Instruction

Copyright 2018 Gang Zhu

ABSTRACT

This dissertation narrates two Chinese and two American student teachers' professional identity constructions during their practicums using the story constellations approach to voice their narrative authority. Informed by Big "D" Discourse theory, knowledge communities, and micropolitical theory, this dissertation showcases the Chinese and American student teachers' stories to live by—a narrative approach to understanding their professional identity formation nested within the shifting landscapes. These professional knowledge landscapes included their personal schooling experiences, teacher education programs, and the placement schools where their rudimentary teaching practices unfurled.

This dissertation situates the participants' professional identity formation at the point where their practical knowledge, emotionality of teaching, and professional vulnerability meet. These intertwined elements foster the understanding of the internal dynamics of student teachers' professional identity development. This dissertation found that the Chinese student teachers experienced eagerness and anxiety at the beginning of their teaching practicums, reality shock amid student teaching, and confidence at the end of the teaching practice. Meanwhile, their American counterparts expressed confidence at the beginning of their student teaching, fragility amid their practicum experiences, and satisfaction at the conclusion of student teaching.

This dissertation reveals some convergences regarding the student teachers' professional identity formation: 1) negotiation between personal and professional identities, 2) reflections linking theory and practice, and 3) the shift from curriculum-implementers to curriculum-makers. This dissertation also uncovered five pairs of divergences in terms of

professional identity construction. These include: 1) different purposes for entering the teaching profession, 2) different program learning experiences, 3) different professional identity orientations, 4) different styles of mentorships, and 5) different pedagogical approaches. After synthesizing the narrative accounts, implications for strengthening the west-east dialogue on teacher education in both China and the U.S. are discussed.

DEDICATION

To my dissertation chair, Dr. Cheryl Craig, for being the inspiring and caring mentor I aspire to be; words will never capture my heart-felt gratitude, respect, and honor I have in calling you my teacher and friend.

To my father, Changan Zhu, for instilling in me the hard-working attitude that has been the persistent driving force behind my ambition and success.

To my mother, Suyun Liu, for modeling insightfulness, humanity, and encouragement, which facilitate my academic growth from a cocoon to a butterfly.

To my brother, Jinsheng Zhu, for showing me generosity, consideration, and helpfulness, which enormously support me during my challenging period.

ACKNOWLEDGEMENTS

Great appreciation is extended to my advisor, Dr. Cheryl Craig, who continually motivates and inspires me throughout this dissertation project. As a leading world researcher and qualitative methodologist in teaching and teacher education, Dr. Craig's has pioneered much ground-breaking research in teacher education, urban school reform, and narrative inquiry. Most of her research has served as solid foundation for my current and future research. Moreover, over the course of my candidacy paper writing, Dr. Craig greatly helped me revise and improve my writing in terms of its scope and clarity. Her kind support is beyond my description. I am also greatly indebted to another committee members, Dr. Hersh Waxman, Dr. Hector Rivera, and Dr. Lynn Burlbaw, who provided timely insights and also supported me during my doctoral study. My dissertation committee members also greatly assisted me in my academic job searches, particularly in the U.S.

Dr. Cameron White, my Ph.D. mentor and former dissertation committee member, also consistently supported me from the inception of my doctoral study at the University of Houston. His humanity, caring, and humor encouraged me all the time. I am grateful to have such a wonderful mentor and friend. Furthermore, Dr. Lee Mountain, who often encouraged me to publish and present, enormously inspiring my academic development.

Finally, I thank my parents, Changan Zhu and Suyun Liu, who I believe are the greatest parents in the world! I am grateful to them for letting me choose my life journey. In late 2014, my dad suffered from partial paralysis and lost his oral speaking ability. My mother has taken care of him ever since. My parents have always been my inspiration toward academic excellence!

CONTRIBUTORS AND FUNDING SOURCES

Contributors

This work was supported by a dissertation committee consisting of Professor Cheryl Craig, Professor Hersh Waxman, and Professor Lynn M. Burlbaw of the Department of Teaching, Learning, and Culture and Professor Hector Rivera of the Department of Educational Psychology.

The narrative analyzed for Chapter I was supported by Professor Cheryl Craig. The analyses depicted in Chapter IV and VII was facilitated in part by Professor Cheryl Craig and Professor Lynn M. Burlbaw.

All the data sources conducted for this dissertation comes from the four student teachers in China and the U.S. Appreciation is extended to their support.

Funding Sources

Graduate study was supported by a fellowship from Texas A&M University and a dissertation research fellowship from Southwest Educational Research Association.

TABLE OF CONTENTS

	Page
ABSTRACT	ii
DEDICATION	iv
ACKNOWLEDGEMENTS	v
CONTRIBUTORS AND FUNDING SOURCES	vi
TABLE OF CONTENTS	vii
LIST OF FIGURES	x
LIST OF TABLES	xi
CHAPTER I INTRODUCTION TO THE INQUIRY	1
“Carp Jumps over the Dragon Gate”: My Schooling Trajectory	2
Looking Backward and Moving Forward: My Student Teaching Experience	6
Aid or Hindrance? My University Supervising Experience	7
How to Facilitate Teachers’ Development: My Teacher Educator Experience.....	9
Chinese Teachers’ Professional Identities	12
American Teachers’ Professional Identities	14
Summary and Reflections	16
CHAPTER II THEORETICAL ORIENTATIONS.....	17
“Stories to Live by”	17
Knowledge Communities.....	18
Micropolitical Theory	21
Big ‘D’ Discourse	22
CHAPTER III LITERATURE REVIEW.....	24
Teacher Education in China	24
Free Teacher Education (FTE) Program	26
Teacher Education in the U.S.....	28
Noyce Scholarship Program.....	31
Student Teaching	32
Professional Identity	34
Teaching Emotionality	36
Dilemmas in Teaching	37
Summary and Reflections	38
CHAPTER IV METHODOLOGY	40

Narrative Inquiry.....	40
Three-dimensional Inquiry Space.....	40
Analytical Tools.....	42
Story Constellations.....	42
Narrative Exemplar.....	43
Trustworthiness of Narrative Accounts	44
Ethical Considerations	45
The Research Contexts.....	45
Introducing the Research Questions	48
Introducing the Participants.....	48
CHAPTER V FINDINGS	52
Hui Yuan.....	53
The Influence of the Mentorship	53
Reality Shock.....	55
The Micropolitics of the School	56
Personal Practical Knowledge	57
Coda	58
Ding Yang.....	60
The Emotionality of Teaching.....	60
The Placement School.....	62
Personal Practical Knowledge	63
Knowledge Communities.....	64
Influence of the University Supervisor	65
Dual Identity Positioning.....	66
Embodied Metaphor: From Fly to Butterfly	67
Coda	68
Aaleyah Baran.....	72
The Influence of the Mentorship	72
Emotional Support	74
Placement School.....	75
School District Policy	76
Funds of Knowledge	77
Relationship Building.....	78
Coda	79
Francisco Garcia.....	80
K-12 Schooling Experience.....	81
Knowledge Communities.....	81
The Placement School.....	82
The Influence of Mentorship	84
The Local Educational Policy.....	85
The Influence of Evaluation	86
Coda	87

CHAPTER VI DISCUSSIONS	89
Convergence of Professional Identity Formation	91
Negotiation Between Personal and Professional Identities	91
Reflection Between Theory and Practice	92
Tensions Between Knowledge for Teaching and Teacher Knowledge	93
Dilemmatic Space in Student Teaching	93
Divergence of Professional Identity Formation	94
Intrinsic/Extrinsic Motivations for Teaching	95
Different Program Learning Experiences	96
Different Field Placement Contexts	97
Different Styles of Mentorship	97
Different Pedagogical Approaches	98
Summary	99
CHAPTER VII SUMMARY AND FUTURE DIRECTIONS	100
Narrative Inquiry As a Mode of Professional Development	100
Story Constellations As Powerful Methods	101
The Vitality of Teachers' Professional Identity	102
The Reform of Student Teaching	103
Limitations and Future Directions	104
REFERENCES	106
APPENDIX A	121
APPENDIX B	122
APPENDIX C	124

LIST OF FIGURES

FIGURE	Page
1 My Professional Stories in Varying Landscapes.....	1
2 The Economic Disparity in China.....	4
3 The Theoretical Orientation of This Dissertation.....	17
4 The Paired Narratives of The Participants' Stories to Live By.....	44
5 The Story Constellations of The Four Participants' Stories to Live By.....	53
6 The Major Story Threads Underlying Hui Yuan's Professional Identities.....	59
7 The Major Story Threads Underlying Ding Yang's Professional Identities.....	71
8 The Major Story Threads Underlying Aaleyah's Professional Identities.....	80
9 The Major Story Threads Underlying Francisco's Professional Identities.....	87

LIST OF TABLES

TABLE	Page
1 The Differences between KCs and PLCs.....	20
2 The Illustrations of the Research Contexts.....	47
3 The Biographies of the Participants.....	49
4 The Convergence of Professional Identity Formation.....	91
5 The Divergence of Professional Identity Formation.....	95

CHAPTER I

INTRODUCTION TO THE INQUIRY

Do not follow where the path may lead. Go instead where there is no path and leave a trail.

—Ralph Waldo Emerson

In this first chapter, I narrated my schooling experiences, student teaching experiences, university supervision, and teacher training experiences in China. Throughout these shifting story contexts, a common thread unfolds: my professional identity being developed in multiple contexts. Specifically, one enduring question has hovered in my mind: As an educator, how do I develop my evolving professional identity, which greatly influences my commitment to the profession? Cumulatively, my student teaching, preservice teacher supervision and teacher training experiences fueled my scholarly interest in students' professional identity (re)construction. In the following section, I narrate experiences that led me to focus on this dissertation theme.

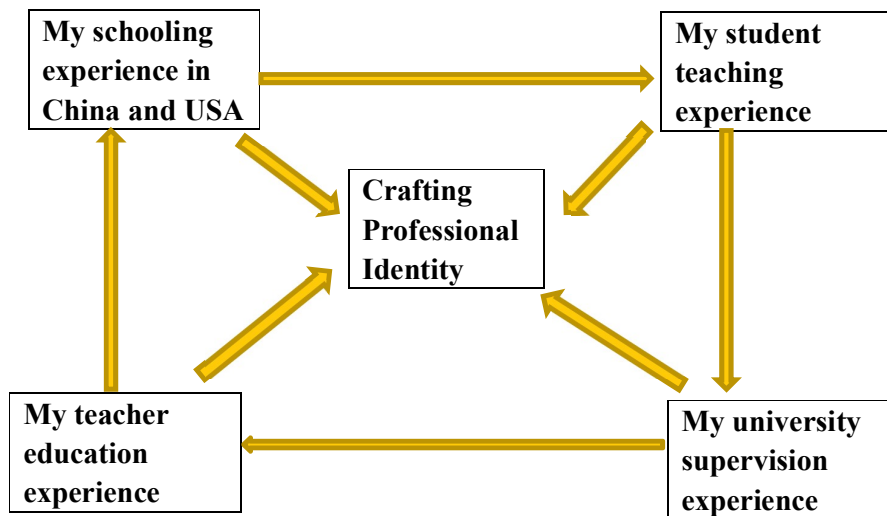


Figure 1: My professional stories in varying landscapes

“Carp Jumps over the Dragon Gate”: My Schooling Trajectory

To begin, I shared my personal schooling experience in China, which helps me to contextualize my research backdrop. I was born in the populated rural Henan Province¹, where I attended elementary, middle, and high school. Some of my peers dropped out because of low academic performance and the less-than-stellar teaching quality there. However, I worked hard and was accepted by the best high school in my hometown. After four years in high school, I attended a provincial college on scholarship. After I matriculated with honors from the college, I began my fully funded graduate work at a prestigious research university—Beijing Normal University, which has the best education and psychology programs in China.

In sum, my schooling experience, at first glance, has been a process of “a carp jump[ing] over the dragon gate”² in the Chinese socio-cultural context. Specifically, for students who live in the traditionally impoverished regions in China, the most important way to change one’s destiny is through college education. Accordingly, the watershed event is the National College Entrance Exam (NCEE) that is administered each June. If students perform well in standardized exams, they can be admitted to one of China’s prestigious universities. After graduation, they can land respectable jobs with decent salaries in major cities, such as Beijing and Shanghai. For this reason, the whole Chinese educational process is encapsulated in the Chinese metaphor of “a carp [fish] jump [ing] over the dragon gate.”

¹ Henan province is in the middle of China. It has the largest population in China, which reached more than 100 million people recently. As a result, it is extremely competitive for a high school student in Henan Province to be admitted into a prestigious college or university.

² “Carp jumps over the dragon gate” is a widely-used metaphor in China. It comes from the Chinese legend that when the carps in the Yellow River jump over the dragon gate, they will become dragons. It originally meant that the ancient Chinese people succeeded in the civil service examination. Over time, though, it began to mean making a success of oneself and succeeding in high-stakes exam in highly competitive, modern China.

My past experiences caused me to feel like I was living on the edge of a knife, always concerned about my next move, intensely focused on promoting and advancing myself in a highly competitive environment, where I continue to believe only a select few will “win.” This sometimes leaves me oblivious of—and sometimes running in opposition to—the expectations of the American institutional context and the needs of others both near and far from me. For example, as the elder son in traditional Chinese culture, I am historically responsible for my parents’ well-being as they age. However, I have made, what some would view, as a highly ambitious decision to study abroad. My younger brother, along with my mother, have assumed the bulk of the load in my physical absence, in addition to me doing everything I possibly can from a distance. Others do not see that I am trying to better my family’s lot in life and to remove financial burdens that have plagued my family members in rural China for generations. Because of these divergent mindsets and cultural differences, misunderstandings about my learning approaches and personal values often occurred when I studied in the U.S.

Also, in the American context where I now study, I sometimes ‘cut corners,’ trying to reach end points early. This leaves me with little time to invest in collaborative projects and sometimes having to be reminded by my faculty advisor to change my mindset. What others do not know is that I do not have limitless time to complete my degree. Everything I do must be career-minded to better prepare me for the job market. What I frequently missed seeing is that working in the throes of community alongside others—rather than on the edge of community—could have also cultivated my abilities, particularly in areas that I have previously not developed. Indeed, perhaps feeling comfortable—as opposed to competitive—

in community could possibly have afforded me the opportunity to relax for the first time in my academic trajectory.

Coming from a rural region in China, I have a very similar socio-economic background to many Free Teacher Education (FTE) students.³ Thus, I became interested in the FTE policy when it was initially piloted by the central Chinese government in 2007. The overarching purpose of the FTE policy is to facilitate educational equity by bridging the increasing opportunity gaps (Darling-Hammond, 2015; Qian & Smyth, 2008) between the rural and urban regions in China.⁴

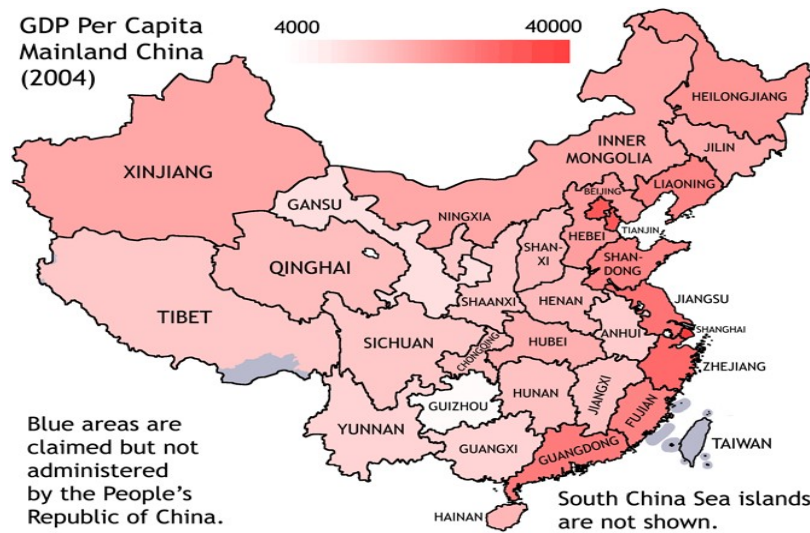


Figure 2: The economic disparity in China

Most students admitted to the FTE program hail from the under-developed provinces in western and middle China. According to the policy, all the admitted candidates must sign a required service contract before officially entering the teacher education program. According

³ Contrary to rural areas in North America, the rural regions in China are usually poor and underdeveloped.

⁴ Some scholars phrase this urban-rural gap as a coast-inland gap in Mainland China. This gap mainly incorporates the huge economic job, cultural, and educational gaps between the eastern and the middle and western provinces. Figure 2 comes from <http://greenfieldgeography.wikispaces.com/Origin+of+disparities>.

to the contract, the preservice teachers are required to work at least 10 years in the rural schools from which they originally came. In the meanwhile, the preservice teachers in the FTE program can enjoy some bonuses from the program. Their tuition and accommodation fees are waived, and they receive monthly stipends from the program during their 4-year college period.

Consequently, this policy presents a doubled-edged sword for them. On one hand, the preservice teachers can overcome their family's financial burdens. The monetary incentive policy is attractive for those who come from lower-income families as my own narrative shows. On the other hand, the FTE students must return to their original places of birth and fulfill their 10-year teaching obligations, which concurrently interferes with their desires for upward social mobility (Wang & Gao, 2013) as my story also illustrates. Consequently, the FTE policy triggers tensions for the preservice teachers enrolled in the program not dissimilar from the knife's edge dilemmas I have faced—and continue to encounter—in my personal and professional life.

The rural education situation in China, coupled with my own personal and professional experiences, have caused me to frame many questions. These queries include:

- 1) How do the preservice teachers construct their professional identities?
- 2) How do they perceive their multiple roles in their teacher education program?
- 3) Does the monetary-incentive policy serve FTE students' professional goals?
- 4) How does the financial-incentive teacher education policy (e.g., Noyce Scholarship Program) influence American preservice teachers' decision to teach?
- 5) What are the similarities and differences regarding American and Chinese preservice

teachers' professional identity trajectories?

My dissertation revolves around the aforementioned themes. In this proposal, I specifically explore the dynamics of the preservice teachers' professional identities in the FTE practicum in China and the Noyce Scholarship practicum in the U.S., respectively.

Looking Backward and Moving Forward: My Student Teaching Experience

Looking backward, my undergraduate student teaching has made a difference on my professional journey. After completing three-months of practice teaching in a local middle school in Henan Province, China, I had the opportunity to reflect on the dynamics of the field experiences in two ways: (1) the relationship between the coursework and the realities of classroom life; (2) the formation of my professional identity as a teacher in the process.

At the beginning of my student teaching, I felt depressed and frustrated. The main problem was that what I had learned in the college classroom could not be directly applied to my middle school classroom in rural China. For instance, I had learned Ralph Tyler's *Basic Principles of Curriculum and Instruction* (Tyler, 1949/2013) and Vygotsky's sociocultural theory (Vygotsky, 1962). However, they were both abstract theories for me back then. I did not know how to integrate these theoretical constructs in my daily classroom instruction. Consequently, I always blamed my teacher preparation courses for not being effective and meaningful to me. My assumption was that the university-based teacher education courses were mainly decontextualized, abstract and based on universal rationales for curriculum and instruction. As expected, the courses did not sufficiently prepare me professionally to tackle the vast complexities of educating youth in rural Chinese K-12 classrooms.

Later however, through engaging in my school-based professional learning community⁵ alongside my cooperating teachers and peers, I gradually accumulated hands-on professional experiences in the classroom. Also, I reshaped and reflected on my professional identity throughout the journey. Transitioning from a preservice teacher to the realities of the classroom setting was not smooth. Indeed, it was full of confusion and challenges. I had to reconcile the disjointed, sometimes even conflicting expectations placed on me by the university supervisor and cooperating teacher. For instance, my university supervisor emphasized the constructivist learning approach (Brophy, 2002) but the cooperating teacher prioritized drill and practice. Therefore, I had to work as a reflective practitioner (Schön, 1983, 1991, 1995) to combine these two orientations in specific contexts.

When I taught the 7th grade student English grammar, my university supervisor hoped that I could design some hands-on classroom activities for students to internalize new grammatical knowledge. Conversely, my cooperating teacher advised me that some of the activities were irrelevant and might take up too much time within the limited instruction session (45 minutes). To resolve the dilemma, I introduced new knowledge by employing group activities. Then the students gradually grasped the key points in the course. For the last 5-10 minutes, I guided the students to summarize and reflect on what they had learned from that class. In this way, I learned that I could be flexible and courses should be designed, but easily altered, to fit specific learning situations and learner needs.

Aid or Hindrance? My University Supervising Experience

During the second year of my master's degree, I was selected as a teaching assistant for

⁵ In Mainland China, professional learning community is literally called the Teaching and Research Group in public schools.

the cohort of post-bachelor teacher education students in Beijing Normal University. The members of the cohort all came from disciplinary majors, such as Chinese language, mathematics, English, physics, and chemistry in a myriad of schools. The students in the cohort all majored in these subjects during their undergraduate studies. However, they all majored in curriculum and instruction during their two-year master's degrees. After graduation, most would work as middle and high school teachers in rural China.⁶

As a teacher assistant, one of my main responsibilities was to facilitate their learning of educational theory that would be applied in practice settings. For the former part, I introduced them to some key educational theorists in China in the hope of expanding their horizons of knowing. For the latter part, I helped them when they did micro-teaching in the laboratory classroom. Also, I supported them in a variety of ways when they student taught in their placement schools.

When reflecting on my university supervision experience now, I question whether I was a legitimate aid in the formation of those preservice teachers' professional identities. My sense is that I did a superficial job. One example is that when the exams were approaching, I only helped them to memorize the key concepts to better tackle the test items. Did I really transform them into profession-ready teachers? Did I help them develop professional identities conducive to future teaching? I am afraid not. I did not achieve these goals. On the

⁶ The program was called "4+2" teacher education program in Beijing Normal University. The aim of the program was to cultivate expert teachers for middle and high school teachers. The program selected applicants who were basic disciplinary majors in Beijing Normal University. If admitted into the program, the applicants were exempt from the national graduate admission exams. Through two-year graduate education, they could get MA degree in curriculum and instruction. Most of them would work as middle school or high school teachers in resource-affluent schools throughout the country. But they were not obligated to enter K-12 teaching. Some of the graduates in the program pursued their PhD degrees inside or outside China. The "4+2" teacher education program stopped in 2012.

contrary, I may have hindered the preservice teachers' professional development to a certain degree. Looking backward, this university supervising experience has helped me to reflect on how to more productively facilitate preservice teachers' growth, especially in their professional identities.

How to Facilitate Teachers' Development: My Teacher Educator Experience

When I worked as an emerging teacher educator in China, I wondered how educational research could better inform practice and policy. My professional identity prompted me to think about the effective approach to facilitate teachers' professional development in the context of national-wide curriculum reform. The curriculum reform initialized in 2001 advocates for a radical shift in perspective from the traditional "teacher-guided, classroom-centered, and textbook-based" approach to the progressive "student-focused, activity-involved, and inquiry-oriented" style (Zhong, 2006). Confronted by these challenges, many teachers did not know how to cope with the new curriculum guidelines. To locate teachers' difficulties and real concerns, I visited four local elementary and middle schools in Hebei Province with my master advisor in the winter of 2011. After systematic investigation, we found that it was difficult for the public-school teachers to shift from the outdated mindsets (teacher-centric, textbook-oriented, and classroom-based) to more progressive ones (student centric, activity-oriented, and society-based). Accordingly, we proposed some principal aims to better support teachers to improve their daily instruction against the backdrop of new curriculum reform in China.

After receiving my MA degree in curriculum and instruction, I worked as a full-time research associate at the Center for Teacher Education Research of Beijing Normal

University. As a national research center affiliated with the Ministry of Education in China, I often engaged in the National Program for Elementary and Middle School Teacher Training (NPemTT). I found that the instructors in the centers mainly *lectured* the in-service teachers and principals who came to receive professional development. The instructors attempted to *transfer* their expertise to the trainees. I supported the instructors during their sessions. Later, I found the teachers and principals were more interested in the real problems in their own educational contexts such as how to better engage students in classroom learning, how to facilitate home-school partnerships, etc. The teachers and principals preferred “theory-in-action” (Argyris & Schon, 1974) to the “rhetoric of conclusions” (Schwab, 1958) that my instructors and I gave them. They wanted to solve the problems troubling their practice. They were not interested in grand educational theories which are usually decontextualized and abstract. Yet the college instructors always emphasized the logic and rigor of research. As a result, the college instructors did not authentically address the teachers and principals’ felt *concerns* in rural China.

Another problem continually plaguing their teacher professional development was that teacher educators always dispense “knowledge for teachers” instead of empowering teachers to develop their “teacher knowledge”. Connelly and Clandinin (2000), who with Craig (2015), made a distinction between knowledge for teachers and teacher knowledge. “Knowledge for teachers” can be identified, put into a curriculum, taught so that it becomes an attribute of the teacher, and may be tested” (Phillion & Connelly, 2004, p. 465). In the same vein, Craig (2015) posits that, for proponents of knowledge-for-teaching, such knowledge can be determined by others and ‘tested, packaged, imparted and sent like bricks

across country to build knowledge structures that are said to accumulate' (Eisner, 1997, p.7). For these individuals, improving educational practice is simply a matter of mandating more or better knowledge for teachers to use. Accordingly, the underlying theory of action (Argyris & Schon, 1978) is that teachers merely transfer legitimate prescribed knowledge and plans (Clandinin & Connelly, 1992; Craig & Ross, 2008). On the contrary, teacher knowledge, which aims to understand teaching in teachers' own terms, is the knowledge that teachers produce in the throes and, as a consequence of, their daily practices (Craig, 2015, p.2). In summary, their knowledge is rooted in experience and practical in nature (Clandinin, 1985; Dewey, 1938; Elbaz, 1983).

When re-examining current teacher professional development programs in China, the dominant approach is dictating “knowledge for teachers” instead of cultivating “teacher knowledge”. In line with this argument, deficient assumptions about teachers abound: “teachers are empty barrels” (“教师是空桶”), “teacher lack theoretical knowledge” (“教师缺乏理论知识”), “teachers need drill and practice guided by teacher educators” (“教师需要教师教育者的机械指导”), etc. However, these images do not fit the real picture. Teachers have personal practical knowledge that inform their actions (Clandinin, 1985; Clandinin & Connelly, 1986; Connelly, Clandinin & He, 1997). This special kind of knowing is forged during their daily classroom instructional activities within varying teaching and learning landscapes. If teacher educators do not pay due attention to teachers' personal practical knowledge, we cannot facilitate pre-service, beginning or experienced teachers' professional development. In most cases, we ignore the fact that teachers have discursively accumulated rich personal and professional experiences conducive to their practice (Clandinin, 1985).

However, teacher educators are prone to externally impose technical know-how to teachers rather than organically integrating teachers' embodied ways of knowing, doing, and living into their professional development (Craig, et al., 2018).

Chinese Teachers' Professional Identities

Since middle school, I have heard widely-used metaphors that describe Chinese teachers' duties and responsibilities, such as teachers are “engineers of the human soul,” (“人类灵魂的工程师”), “gardeners of young minds” (“学生思想的园丁”), “the ones holding the golden keys,” (“握着金钥匙的人”) and “developers of intellectual resources” (“智力资源的培育者”) (Paine, 1990). This storehouse of figurative descriptions is deeply rooted in students' and parents' minds. A common image for a Chinese teacher is someone who is a good moral role model, represents authority, is knowledgeable in subject matter, and enacts the parental role to some degree (Li & Du, 2014).

In accordance with these widely-acknowledged images, Chinese teachers should not only master subject area knowledge but also cultivate students' moral characteristics such as honesty and persistence. From the perspective of many educational administrators, teachers' morals (Tan, 2012) are more important than their subject background and pedagogical content knowledge (Shulman, 1986; 1987). Specifically, if a teacher behaves inappropriately toward the students, he or she will be disqualified from any school-nominated award or prize. Because of this, Chinese teachers are normally respected by the whole society. At the same time, teachers will go to great lengths to cover up problems rather than addressing them.

Apart from emphasizing teachers' morals, Chinese teachers' jobs are stable and their salaries are comparatively reasonable. For these two reasons, China has a nationally stable

teaching force, except in the rural areas (Wang, 2007; Ye, 2016). Also, preservice teachers in China are mainly females. In the Chinese educational context, teaching is viewed as a less stressful job than business and other professions. These characteristics attract many females into the teaching profession and also influences their professional identities as members of a “lower profession” (Glazer, 2001). Locked in the gendered stereotype of the teaching profession, the female candidates in the FTE program assume that teaching is an appropriate occupation for women. When working as a teacher, they can better balance work, child-bearing and family, which is a near-universal story in Chinese society.

When I interviewed one mathematics senior in the FTE program in China, she accounted for her entry into the teaching profession this way:

My grandparent and parents realize the importance of working as a *former worker* in an institution. Without the quota, my future would be unstable and unpredictable. A telling example is my uncle, who worked as an *informal worker* in China and had no pension when he retired. This has brought a heavy financial burden on him. Personally, the most important attraction to the Free Teacher Education (FTE) program is that I can secure a guaranteed job after graduation. (Field note, 03/2016)

When I interviewed another preservice teacher in the Free Teacher Education (FTE) program, she expressed a similar view. From the interviews, it can be found that the job guarantee is a major incentive for entering into the FTE teaching profession. My interviews also corroborate Wang and Gao’s finding (2013) that due to the expansion of higher education in China in the late 1990s, employment for university graduates had become a significant challenge for both the government and college students. This explains why a guaranteed job is especially appealing to graduates.

Looking at the macro-policy contexts in 2001, the Ministry of Education in China initiated a national school curriculum reforms that aimed to shift the school curriculum from

its highly teacher-centered to a more student-centered focus. In direct response to this longitudinal reform, a national teacher education curriculum effort began in 2006 (Ministry of Education, 2005) and continuing thereafter (Ministry of Education, 2011), which sought to move teacher education from its strong disciplinary or subject-bound focus to one with greater emphasis on pedagogy (Wang & Clarke, 2014). To align with this newly emergent requirement, the teachers needed to shift their image from “teachers as curriculum implementers” (Teachers are required by law to technically implement the predetermined curriculum materials and to enact the learning activities) to “teachers as curriculum makers” (Teachers have autonomy to weave their personal practical knowledge into students’ curricular experiences) (Clandinin & Connelly, 1992; Craig & Ross, 2008; Craig, 2012).

Moreover, nestled within these varying landscapes, the FTE students have to reconcile their university coursework with their practicum experiences in the schools. Consequently, the FTE students craft their professional identities within divergent, sometimes conflicting, backdrops.

American Teachers’ Professional Identities

Since 2013, I have studied and worked in the U.S. This gave me numerous opportunities to accumulate hands-on experience and to examine American teacher education programs. Contrary to the centralized and homogeneous teacher education governance in Mainland China, American teacher education, as a contested and evolving area, is marked by state accreditation, neoliberal-market ideology, and a high degree of diversity (Tatto, 2015). I worked as a voluntary elementary school mathematics teacher and a tutor in Houston ISD from 2013-2014. Then I worked as a volunteer science teacher assistant in Bryan ISD in

2016. These professional experiences provided me with opportunities to reflect on how to cultivate positive and resilient professional identities conducive to culturally-responsive and competent teaching.

At the outset of my research on American teacher education, especially involving urban teacher education and STEM (Science, Technology, Engineering, and Mathematics) teacher education, I surprisingly found that the conundrums that plague the American teacher education are somewhat different from those in China. A telling example is that American teacher attrition rate is alarmingly higher than that in China, which forged the “revolving door” teacher shortage crisis (Ingersoll, 2004). Why do American teachers leave the teaching profession—Why do they shift from “stories to live by” (Clandinin & Connelly, 1999) to “stories to leave by”? (Clandinin, Downey, & Huber, 2009). Which contextual factors contribute to teachers’ emotional exhaustion and depersonalization?

Intrigued by what others deem to be “wicked problem” (Jordan, Kleinsasser & Roe, 2014), I found that the reasons contributing to high teacher attrition rate in the U.S. not only include burdensome workloads (e.g., state standard tests, after-school programs) and value-added evaluation policy (e.g. accountability policy), but also were associated with teachers’ professional identities—loss of their best-loved selves that sustain teachers as curriculum-makers and their corresponding autonomy (Craig, 2013). Following this academic genealogy, I found that Chinese novice teachers from the FTE program are experiencing noticeably higher teacher attrition due to unresolvable identity tensions as well. These aforementioned research experiences prompted me to further explore the importance of teachers’ professional identity, especially along the continuum from preservice to in-service teachers in both China

and the U.S.

As PISA (Program for International Student Assessment), TALIS (Teaching and Learning International Survey), and TIMSS (Trends in International Mathematics and Science Study) assessments provide international benchmark parameters for the quality of global education, international-comparative education has increasingly garnered worldwide recognition. When Finland, Singapore, Ontario and Alberta in Canada, and the city of Shanghai in China consistently performed high in students' academic achievement globally, the Western-Eastern dialogue on teaching and teacher education accelerated. Against this grand-story backdrop, it is necessary to share "small stories" (Olson & Craig, 2009) through "story constellations" (Craig, 2007) to capture the nuances of the Chinese and American teachers' fluid and dynamic identities nested in their professional knowledge landscapes (Clandinin & Connelly, 1995).

Summary and Reflections

In this chapter, I presented my autobiographic narratives associated with my schooling trajectory in China and the U.S., my student teaching, university supervision, teacher education experiences in different contexts. The waft and weft of these "stories" and "experiences" serve as portal entries for me to further explore the recurring themes—teachers' stories to live by (Clandinin & Connelly, 1995), a narrative approach to understanding teachers' dynamic professional identities—unfurling across different contexts. Intrigued by this major topic, also a vital concern in international teacher education, I endeavor to narrate the Chinese and American student teachers' professional identities during practicums.

CHAPTER II

THEORETICAL ORIENTATIONS

To date, scholars have conceptualized teachers' professional identities from a broad array of theoretical lenses, such as dialogical approach (Akkerman & Meijer, 2011), possible-selves theory (Hamman, Gosselin, Romano, & Bunuan, 2010), and critical race theory (Ladson-Billings, 2009). All these stances enrich our understanding about the multifaceted nature of professional identity. Inspired by former studies, I draw upon four related theoretical frameworks, which supplement each other to inform this dissertation (Figure 3).

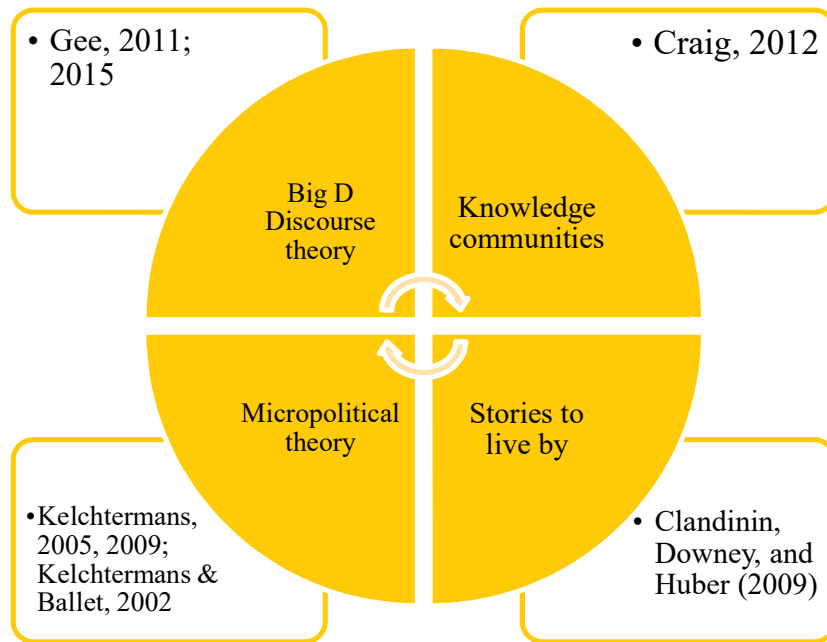


Figure 3: The theoretical orientation of this dissertation

“Stories to Live by”

The first theoretical framework that frames this dissertation is “stories to live by” (Connelly & Clandinin, 1999). Clandinin, Downey, and Huber (2009) defined “stories to live

by” as “the way of speaking of the stories that teachers live out in practice and tell of who they are, and are becoming, as teachers” (p. 141-142.). Meanwhile, “stories to live by”, acting as a narrative-oriented conception of identity, “speak to the nexus of teachers’ personal practical knowledge and the landscapes [in and out of schools], past and present, on which teachers live and work” (Clandin, Downey, & Huber, 2009, p. 141). Thus, “stories to live by” provides an analytical framework for conceptualizing beginning teachers’ evolving identities that allow them to enter, stay, or leave the teaching profession in schools. They allow us to attune to the interwoven lives of beginning teachers in the midst of shifting professional knowledge landscapes (Clandinin & Connelly, 1995).

From the perspective of narrative inquiry, experience is “a changing stream that is characterized by continuous interaction of human thought with our personal, social and material environment” (Clandinin & Rosiek, 2007, p.39). When thinking narratively, we are open to the multiplicity of identities including the personal, professional, institutional, cultural, and familial narratives in which we are embedded. Flores and Day (2006) similarly proposed identity making as an ongoing and dynamic process that embodies the continuous interpretation and reinterpretation of one’s own values and experiences.

Knowledge Communities

The second major conceptualization that associated with this dissertation project is knowledge communities (KCs). In recent years, scholars have studied the formation of teacher communities and the possibilities they provide for the development of teacher knowledge and teacher identities, particularly for new teachers (Cochran-Smith & Lytle, 1999; Grossman, Wineburg, & Woolworth, 2001; Lieberman & Miller, 2008). Similarly,

when examining their identity formation, it can be found that the student-teachers learn to teach and articulate their growing sense of professional identities in knowledge communities (Schultz & Ravitch, 2012).

In her research with beginning (Craig, 1995a, 1995b) and experienced (Craig, 2007; Curtis et al., 2013) teachers, Craig (2007) noted that knowledge communities are places where teachers negotiate meaning for their stories and experiences. In these groups, teachers make public their knowledge, practices, and beliefs through conversations with other beginning teachers. In their focus on the development of teacher knowledge narrative authority, Olson and Craig (2009) illustrate how teachers' narrative authority is nurtured in knowledge communities and through their telling and retelling of stories or narratives of experience (Connelly & Clandinin, 1990). As Olson and Craig explain,

Knowledge communities are the places where each individual's narrative authority is recognized and developed. As such, individuals can tentatively articulate how they are making sense of situations, explain their own actions, and examine their stories in concert with others. In knowledge communities, it is possible for individuals' narrative authority to be articulated, examined, and confirmed, expanded, or revised in light of others' experience and others' reflections and responses to our experiences. (Olson & Craig, 2009, p. 670)

Later, Craig (2012, p.108) compared knowledge communities and professional learning communities developed by DuFour (e.g., DuFour 2001, 2004; DuFour & Eaker, 1998) based on her school-based observations in a context where professional learning communities (PLCs) were being introduced to a faculty.

Table 1: The differences between KCs and PLCs

Knowledge Communities	Professional Learning Communities
Organically lived	Administratively introduced
Can be found or make	Expected to be present
Commonplaces of experience	Focus on learning rather than teaching
Relational among individuals and across group; collaborations emerge	Collaboration anticipated at the outset
May exist within members of various groups; also occur between teachers who interact for their own purposes	Any visible group within a school/organization
Accounts of practice	Accountable for results
Fueled by a practical view of knowledge	Driven by a formal view of knowledge

Reprinted from: Craig, C. (2009) Research in the midst of organized school reform: versions of teacher community in tension. *American Educational Research Journal*, 46 (2), 598–619.

From the perspective of knowledge communities, how student-teachers form their professional identities by recognizing their narrative authority in multiple knowledge communities can be traced. As Schultz and Ravitch (2012) suggest, people construct professional identities in relation to context and experience and in relation to one another. These identities are not intrinsic or separate from social contexts and interactions; rather they are embodied and enacted in practice (p. 37). In this vein, student-teachers do not acquire their professional identities on their own. Rather, the professional identities formation process is deeply connected to the communities in which they learn to teach and to their interactions with colleagues, students and families as they engage in learning pedagogical practice.

The construct of knowledge communities is a suitable theoretical lens for analyzing the Chinese and the American STs' professional identities during their practicums. As STs are comparative newcomers to their professional knowledge landscapes, they have different ideological norms to learn and various practical responsibilities to fulfill. Dynamic

interactions among related stakeholders influences identity development and relationship building.

Micropolitical Theory

The third theoretical orientation underling this dissertation is micropolitical theory (Blasé, 1991; Kelchtermans, 2005, 2009; Kelchtermans & Ballet, 2002). Micropolitics “is about power and how people use it to influence others and to protect themselves” (Blase, 1991, p.1). Micropolitics act in overt and covert ways within organizations, as individuals and groups seek formal and informal powers to achieve their goals (Tan, 2015). As a powerful analytical tool, micropolitical theory has been widely used in broad research areas such as school leadership (e.g., Ball, 1987; Blase & Anderson, 1995), educational reform (e.g., Blase & Björk, 2010), teacher induction (e.g., Schempp, Sparkes, & Templin, 1993), and teacher collaboration (e.g., Achinstein, 2002). Since micropolitics is a fundamental dimension of life in schools (Blase, 1997), becoming a teacher is both a highly emotional and a political endeavor that involves the continuous negotiation of organizational power (Jokikokko et al., 2017; Kelchtermans, 2011; Kelchtermans & Ballet, 2002). Thus, the micropolitical theory contributes a robust framework for analysis for this study.

In teaching practicums, it is inevitable that STs have encounters that require them to cope with a multitude of emotional tensions and dilemmas associated with their micropolitical contexts. For instance, STs have to establish appropriate mentorships with their mentors (e.g., avoid theoretical and practical conflicts, gain support and became independent simultaneously). STs also need to navigate divergent commitments (e.g. teaching responsibility vs. overloaded office work) during teaching practicums. These hierarchical

power dynamics contribute to the potential uncertainty and fragility of their professional identity formation (Jokikokko et al., 2017). For this reason, micropolitical theory provides a fruitful theoretical lens from which one can gain insights into STs' power and interest relationships with their school-based mentor teachers and university supervisors.

This dissertation's fourth strand of theoretical underpinning is the "Big 'D' Discourse" theory (Gee, 2015). The notion of "Big 'D' Discourse" ("Discourse" spelled with a capital "D") is meant to capture the ways in which people enact and recognize socially and historically significant identities or "kinds of people" through well-integrated combinations of language, actions, interactions, objects, tools, technologies, beliefs, and values (Gee, 2015). The notion stresses how "discourse" (language in use among people) is always also a "conversation" among different historically formed Discourses (that is, a "conversation" among different socially and historically significant kinds of people or social groups). The notion of "Big 'D' Discourse" sets a larger context for the analysis of "discourse" (with a little "d"), that is, the analysis of language in use.

Big 'D' Discourse

As a widely used theoretical construct in a multitude of disciplines, "Big 'D' Discourse" theory has an intimate relationship to this dissertation. Gee (2011) posits that a person conveys his or her identity through ways of acting, interacting, believing, valuing, dressing, and using various objects, tools, and technologies. Following Gee's thinking, Big D Discourse, acting as a powerful entry portal, encompasses the multifaceted of the STs' thinking, believing, and acting during the practicums. Second, "Big 'D' Discourse" offers a space for "international collaborative inquiry". Through constant comparison and contrast

analysis, readers can understand how the Chinese and American student teachers' professional identities are revealed by the "Discourse" they use.

In this scenario, Discourse captures the Chinese and American STs' continuous reconciliation of their emerging professional identities in placement schools. In their discursive narratives, student teachers might incorporate multiple vantage points (e.g. knowledge disseminator, care givers, and classroom manager) to position themselves in one specific situation. For this research project, it is expected that the Chinese and American STs continually position themselves and are positioned by other stakeholders (e.g. school-based mentor teachers and university supervisors) through discourses enacted during teaching practicums, which embody their emotions, vulnerability, and professional identity construction. In summary, these four theoretical frameworks — "stories to live by/stories to leave by", knowledge communities, Big "D" Discourse, and micropolitical theory — provide insightful and supplementary lenses to examine the Chinese and American STs' professional identities during their teaching practicums.

CHAPTER III

LITERATURE REVIEW

Urging all of us to open our minds and hearts so that we can know beyond the boundaries of what is acceptable, so that we can think and rethink, so that we can create new visions, I celebrate teaching that enables transgressions — a movement against and beyond boundaries. It is that movement which makes education the practice of freedom.

— bell hooks, Teaching to Transgress

In this chapter, I systematically review mainstream literatures related to reformed-minded teacher education programs in China and the U.S., teachers' professional identity, and the practicum experience as understood in global contexts. First, I outline the landscape of equity-oriented teacher programs in China and the U.S. Then I critique research on student teaching, professional identity, and mentorship in these two countries. All these aforementioned areas are related to FTE student teachers' and Noyce Scholars' professional identity construction in China and the U.S. respectively. Finally, I summarize current research on student teachers' professional identity.

Teacher Education in China

Chinese education is greatly influenced by traditional Chinese culture (Gu, 2006). Grounded in Confucian norms of orthodoxy, now reinforced by a concern with making teaching “scientific” in accordance with “educational laws,” (Paine, 1990), Chinese teachers are endeavoring to combine the “artistic” (personal teaching aesthetic) and “scientific” (content knowledge) aspects of teaching. For this reason, Chinese teaching can be summarized as a “virtuoso” model (Paine, 1990), which puts knowledge transmission and reception at the centerpiece of teaching and positions teachers in an ultimate position of authority.

Resonating with this internalized image, Chinese student teaching usually emphasizes knowledge acquisition and pedagogical content knowledge (Shulman, 1986, 1987).

Accordingly, the Chinese student-teachers mainly adopt two models in the practicum: the apprenticeship model and the virtuoso model (Tsui & Wong, 2010). The former model in China has been referred to as “the old guiding the young” (*lao dai qing*). “Old” and “young” refer to experience rather than age, though the two are not unrelated. Specifically, each new teacher is assigned a mentor who is a backbone teacher (explain what a backbone teacher is—perhaps cite Bu & Xu) in the school within the same lesson preparation group in order to give daily support to him or her in terms of pedagogical skills and subject matter knowledge (Tsui & Wong, 2010, p 10). For the latter model, as mentioned in the preceding discussion, teachers’ professional learning in China gives central importance to subject matter knowledge. This means that teachers need to explicitly spell out the aspects of the topic or concepts students need to learn, the key aspects or concepts in that topic and the aspects or concepts that students find most difficult. After this, careful lesson planning is done with every step choreographed under the guidance of mentors, teacher research organizers and master teachers. The lesson will be taught numerous times, critiqued, and modified until it becomes like a standard piece in a performance repertoire which will be practiced and rehearsed again and again until the teaching becomes automatic (Tsui & Wong, 2010, p 12).

All in all, preservice teacher education in China has typically been characterized by its subject-centered emphasis, theory-laden orientation, and centralized state management. Such an approach has provided preservice teacher education with a degree of stability despite the significant social and economic changes that have taken place in recent decades. However,

this approach is hardly sufficient for the kind of transformation that the Chinese education system is currently experiencing (Lo, 2008. p.1).

Since the inception of the Reform and Open Door policy, teacher education in Mainland China is accompanied by the economic shift from a planned to a market economy and the political shift from central control to devolved and distributed management (Shi & Englert, 2008). With the advent of information and knowledge society (Friedman, 2005), teacher education in Mainland China revolves around the discussions on merger and amalgamation of institutions, teachers' life-long time learning and internalization (Zhou, 2014).

The teaching and teacher education I have described above in China rationalize the Chinese student teachers' learning and practicum experiences in different ways. The Chinese student teachers are influenced by the status quo of the background directly or indirectly. Their teaching and teacher education contexts serve as important portals (Clandinin & Connelly, 2002) through which the Chinese student teachers form their professional identities.

Free Teacher Education (FTE) Program

The K-12 school system in China is highly imbalanced between urban and rural schools (Wang, 2011a, 2011b; Chu, 2009; Li, Huang & Li, 2010). To solve the significant gap between the rural and urban schools, the Chinese government piloted the Free Teacher Education (FTE) program in 2007 in the six top normal universities (teacher education universities) with the aim of enlisting highly-qualified young graduates to join the teaching

force to improve education in China's underdeveloped rural regions.⁷ The FTE program is a political means to coordinate the redistribution of educational resources, which have the potential to diminish regional disparity in the teaching force, enhance the quality and quantity of teachers in rural areas, and promote educational equity for school-age children in China (Hu, 2007; Sun, 2007; Yang & Wang, 2007).

The FTE program offers enrolled students an attractive package of financial benefits, which include tuition exemption, free accommodation, and a monthly stipend (Ministry of Education, 2007). Along with the economic benefits come obligations. After graduation, the FTE students are required to serve for a period of ten years in primary or secondary schools in their home provinces. These teaching positions are guaranteed by the government. Those FTE students who find employment in urban schools are obliged to teach in rural schools for two years first. Should they break the contract, FTE candidates must bear the consequences of refunding all educational costs, paying a certain amount penalty, and being blacklisted in the Credit Record Archives that are to be established by the educational authorities (Ministry of Education, 2007, 2010).

The FTE program thus relies heavily on utilitarian, particularly financial, incentives to attract candidates. Recent research shows that the financial incentives of the FTE program have been effective in motivating applicants (Fang & Qi, 2011; Li, 2010; Li & Xu, 2011; Ye, Sun, Liu, Zhu, & Xiao, 2010; Zhou, 2010.) However, excessive reliance on utilitarian

⁷ In China, the six key normal universities under the direct leadership of the Ministry of Education are Beijing Normal University, East China Normal University, Central China Normal University, Northeast Normal University, Southwest University and Shaanxi Normal University. These six universities are famous for cultivating quality teachers and education research. All of them are Tier 1 research-intensive institutions in China.

incentives is likely to trigger a conflict between students' educational aims and the goals of the FTE program (Wang & Gao, 2013). In Zhou's (2010) study of the employment plans of 1800 FTE students, more than 80% of the students showed a strong willingness to break the contract and shift to other occupations. Another survey at Central China Normal University found that only 5.2% of 400 FTE students in the study were willing to work in the underdeveloped rural areas, while 78% of the surveyed students aspired to obtain positions in urban elite schools, which offer excellent working conditions and premium compensation (Li, Ren, Zhang & Wang, 2011). Thus, according social equity to students while suspending their own social mobility, represents a major obstacle to reducing the disparity in educational quality (Wang & Gao, 2013).

Teacher Education in the U.S.

With the ebb and flow of public school reform in the U.S., American teacher education reforms, characterized by high-stakes standardized tests, quality assurance, accountability, and value-added evaluation, repeatedly encounter divergent ideological chasms (Cochran-Smith et al., 2017; Darling-Hammond & Bransford, 2007; Ravitch, 2010; 2013). Different from the traditional top-down and government-initiated approach to reforming teacher education in Mainland China, American teacher education reforms are replete with contrasting ideological norms and stakeholders (Berliner, 2006), such as alternative teacher certificate providers and Teach for America (Schneider, 2014). All these involved macro-, meso-, and micro- level "game players" continually contribute to the increasing complexities of teacher education in the U.S.

In more recent decades, researchers realized the limitations of traditional reform

paradigm, especially stimulated by the international large-scale teaching tests (e.g., PISA, TALIS, and TIMSS) (Sahlberg, 2014). In this scenario, educational reformers relentlessly advocate “the fourth way” (Hargreaves & Shirley, 2009) and the incubation of professional capital (Hargreaves & Fullan, 2012). However, compared with alternative route to the teaching profession, university-based teacher education is still the mainstream teacher education provider and found to be effective (Darling-Hammond, 2000). As the policy climate has shifted from No Child Left Behind to Race to the Top, teachers’ attitudes range from hardcore adopter to critical adopter and sometimes encounter the transition attritions as they implement Common Core State Standards (Martinie, Kim & Abernathy, 2016).

To date, there are three major orientations to teacher education in the U.S. The first category is *social-justice oriented teacher education*. Under the umbrella of this camp, there are several schools of teacher education, such as culturally-relevant teacher education (e.g., Gay, 2010; Ladson-Billings, 2014) and urban teacher education from the lens of critical race theory (e.g., Milner, 2013; Yosso, 2005). Social-justice teacher educators bring race, gender, poverty, and cultural capital to the forefront when they analyze teacher education. Accordingly, they acknowledge the social and cultural inequity widespread in schools and communities. To combat the racial and educational gap, they doubt the deficit perspective on minority groups and suggest participatory critical pedagogy to transform this deep-rooted inequity epidemic (Sleeter & Cornbleth, 2011).

The second strand of teacher education research is *experience-based teacher education*. Inheriting Dewey-Schwab-Jackson-Greene’s organic legacy on the interaction and continuity nature of experience (Ben-Peretz & Craig, 2017), this strand of teacher education researchers

foregrounds teachers' personal practical knowledge and the image of teachers as "fountainheads of curriculum" (Schwab, 1983) nested within the dynamic professional knowledge landscape (Connelly & Clandinin, 2000). Experience-based teacher education researchers aim to empower teachers' agency and challenge the traditional discourses imposed on teachers' professional lives. Further, this strand of scholars endeavors to understand teaching in teachers' own terms and integrate teachers' personal and professional experiences. Instead of imparting pre-designed and tested knowledge to teachers, this group of researchers posit that teacher knowledge is contextual, embodied, and in flux (Ben-Peretz, 2011; Craig et al., 2018).

The third strand is *knowledge-based teacher education research*. Influenced by Shulman's typology of teacher knowledge, especially the constructs of pedagogical content knowledge (Shulman, 1987) and signature pedagogy (Shulman, 2005), this cohort of scholars endeavor to seek the cardinal and necessary knowledge for effective teaching. Following this line, Grossman and colleagues (2009) conducted a cross-professional research on teaching and distilled "core practice" for preparing high-qualified teachers. Similarly, Hill, Ball and their colleagues (2005) empirically developed practice-oriented Mathematics Knowledge for Teaching (MKT) in mathematics teacher education.

Regarding teacher education research per se, Grossman (2008) claimed that university-based teacher educators are dangerously facing two jurisdictional challenges on two key professional tasks: the preparation of new professionals and the production of academic knowledge for the profession. To change the crisis to opportunity, Grossman, Hammerness and McDonald (2009) suggested that teacher education should be organized around a core set

of practices. They also proposed to resolve a series of dichotomies in teacher education, including foundations and method courses, as well as the partnership between universities and schools (Grossman & McDonald, 2008; 2009).

Noyce Scholarship Program

In the U.S., sweeping legislative calls repeatedly emerge to redress the pipeline and leakage of the Science, Technology, Engineering, and Mathematics (STEM) issues. Globally, American students' STEM academic performances are periodically outperformed by their counterparts in Finland and South Korea, which endanger American economic prosperity and competitiveness (Liou & Lawrenz, 2011).⁸ To recruit, prepare, and retain high-quality STEM teachers, National Science Foundation (NSF) initiated the Noyce Scholarship Program to recruit both traditional and alternate routes to teacher certification throughout the country.

Based on 434 surveys from Noyce Scholars and 19 interviews with school district representatives, Bowe, Braam, Lawrenz, and Kirchhoff (2011) demonstrated that Noyce Scholars from alternative and traditional programs were similar in demographic characteristics but different in background experiences and beliefs about teaching. Moreover, the data suggest that alternative routes might attract more candidates who are more likely to teach the STEM disciplines in high need schools.

Until now, researchers have examined the influence of the financial incentive on Noyce Scholars' decision to choose the teaching profession (e.g., Bischoff, French, & Schaumlöffel, 2014) and STEM teacher recruitment (e.g., Morrell & Salomone, 2017). However, there is no

⁸In both Trends in International Mathematics and Science Study (TIMSS), and the Program for International Student Assessment (PISA), U.S. students were outperformed by students in other nations. Taking the TIMSS 2007 for instance, the ranking of the average science score of the eighth-grade U.S. students was 11th of 50 countries (Martin, Mullis, & Foy, 2008). In addition, in the PISA 2006, 15-year-old U.S. students ranked 29 of 57 countries (Organization for Economic Co-operative and Development, 2007).

explicit study that examines Noyce scholars' professional identity constructions during the student teaching period. Accordingly, it is necessary to fill this research gap in this dissertation.

Student Teaching

The quality of student-teachers' learning experiences in the field is of great concern to those involved in initial teacher preparation. Consequently, field experience has been regarded as the most favorable component of initial teacher education that contributes to student teachers' professional learning (Cheng et al., 2009). Whilst varies in scope and duration, student teaching is arguably a capstone and critical constituent part for pre-service teachers' transition to teaching (e.g., Lawson, Çakmak, Gündüz, & Busher, 2015; Zeichner, 2002).

Globally, practicums have varying orientations in different countries, which range from ICT integration in South Korea (e.g., Han, Shin & Ko, 2017) and reflective practice in Australia (e.g., Walkington, 2005) to action research in Hong Kong (e.g., Trent, 2010). Amid this practical phase, STs can reexamine the connections between theory (e.g., university-based coursework) and the practice (e.g., field experiences) (Zeichner, 2010). Additionally, STs are inclined to shape their possible and actual professional identities (Timoššuk & Ugaste, 2010; Lamote & Engels, 2010; Schepens, et al., 2009) by wrestling with the dichotomies between theory and practice (Standal, Moen, & Moe, 2014).

More recently, STs' beliefs, motivations, and resulting emotional experiences also have caught researchers' attention. To illustrate, in the Chinese socio-cultural context, STs actively engaged in the construction of their knowledge about language teaching and interacted with a

wide range of socializing factors (Yuan & Lee, 2014). Meanwhile, the emotionality of the STs' professional identity is idiosyncratic and evolving (Yuan & Lee, 2016; Zhu, 2017) when it is viewed from the perspective of dilemmatic spaces (Fransson, & Grannäs, 2013).

Regarding the dynamics of student-teachers' professional learning in the field, Tang (2003) discovered that student teachers construct their teaching selves in three facets of the student teaching context: action context, the socio-professional context, and the supervisory context. Also, her research points to four possibilities of professional learning: stasis (low challenge, low support), confirmation (equilibrium, and resonance), retreat (tension and dissonance) and growth (from tension to equilibrium, from dissonance to resonance) (Tang, 2003; p. 493). Similarly, the Chinese student teacher have to negotiate the different expectations of their mentor teachers and university supervisors, especially the disjuncture between school and university expectations for practicum students (Wang & Clarke, 2014).

Another intimate practicum topic which is worthy of exploration is mentoring (Mena, Hennissen & Loughran, 2017). Mena, García, Clarke, and Barkatsas (2016) analyzed three different mentorships (i.e., dialogue journaling, regular conferences, and stimulated-recall conferences) and their impact on knowledge generation (i.e., recalls, appraisals, rules and artefacts) in practicum contexts. By adopting propositional discourse analysis, they revealed that dialogue journaling demonstrated more appraisals of practice, regular conferences emphasized rules and artefacts, and stimulated-recall favored more precision in the type of the arguments stated. The three mentoring styles favor different but complementary understandings of practice and point to the impact of various approaches to mentoring on the sort of knowledge shared and generated in post-lesson mentoring conferences (Mena, García,

Clarke & Barkatsas, 2016).

Concerning the limits of current practicum experiences, after researching twelve New Zealand first-year teachers, Grudnoff (2011) found that practicum experiences did not always prepare them adequately for their entry into the profession, and practicum need to be reconsidered in order to more effectively prepare student teachers for the complexities and demands of beginning teaching. Meanwhile, student teachers with constructivist pupil-oriented methods reduce their negative experiences and promote learning about teaching (Timoštšuk, Kikas, & Normak, 2016).

Professional Identity

In the last decade, teachers' professional identity has emerged as a separate research area (e.g., Beijaard, Meijer, & Verloop, 2004; Hong, 2010). Currently, there are several theoretical orientations on teacher professional identity, such as sociocultural lens (e.g., Lasky, 2005; Olsen, 2008; Sfard & Prusak, 2005), discourse analysis studies (e.g., Gee, 2000), and power relations analysis (e.g., Fuller, Hodgkinson, & Unwin, 2005). Although scholars have different orientations, they all acknowledge that professional identities strongly determine the way teachers teach, the way they develop as teachers, and their attitudes toward educational changes (Beauchamp & Thomas, 2009; Olsen, 2008).

Beijaard et al. (2004) concluded that teacher identity is: (1) “an ongoing process of interpretation and reinterpretation of experiences”, (2) implies both person and context”, (3) “consists of sub-identities, and (4) embraces “agency” (meaning that teachers are active during their teaching careers) (p. 122.) Due to the complexities and multiplicities of teacher identity, a multidimensional framework for examining teacher identity needs to be examined

(Trent, 2015). As Beijaard, Meijer, and Verloop (2004) analyzed, identity is a concept with different meanings and definitions in the more general literature as well as in the domain of teaching and teacher education. Hence, diverse theoretical frameworks suggest “multiple dimensions of identity in the inclusion of ‘how to be’, ‘how to act’ and ‘how to understand’ as elements for attention” (Beauchamp & Thomas, 2009; p. 178).

To achieve the aforementioned aim, Bukor (2015) examined teachers’ personal and professional selves from a holistic perspective, and she found that teachers’ beliefs associated with their family environments have great impacts on their professional identity construction. From the socio-cultural perspective, becoming a teacher means developing a professional identity. This involves the development of a professional framework of interpretation regarding education and oneself as a teacher in that educational practice (Craig, Zou, & Curtis, 2017; ten Dam & Blom, 2006). Furthermore, Cattley (2007) analyzed the potential influence of reflective writing upon the emergence of a professional identity during pre-service teachers’ practicum placements. This suggests that reflective writing is a valuable tool for professional identity formation (Craig, Zou & Curtis, 2015).

In her mixed-methods which included 84 participant surveys, and 27 interviews from four groups of participants at different stages of teaching, Hong (2010) divided teachers’ professional identity into six factors: value, efficacy, commitment, emotions, knowledge, beliefs, and micro-politics. She showed that pre-service teachers tended to have naïve and idealistic perceptions of teaching, and those who dropout of teaching show the most emotional burnout (Hong, 2010). Similarly, Lamote and Engels (2010) found that students with work placement experience developed a more “realistic” view of learning and teaching

compared to students without this experience. Additionally, another important difference in professional identity is based on students' gender: white male students tend to attach more importance to discipline in the classroom whereas their female counterparts focus more on student involvement (Lamote & Engels, 2010).

What these various studies have in common is the idea that identity is not a fixed attribute of a person, but a relational phenomenon (Clandinin, 2010). Identity development occurs in an intersubjective field and can be best characterized as an ongoing process, a process of interpreting oneself as a certain kind of person and being recognized as such in a given context (Gee, 2001). Furthermore, I concur with Mishler's (2009) argument, that there is not one identity, but rather sub-identities that may sometimes conflict or align with each other within individual teachers. Mishler's metaphor about identity as "ourselves as a chorus of voices, not just the tenor or the soprano soloist [sic]" (p.8) is apt as the researcher analyzed the expressions of personal and professional identity offered by these FTE and Noyce Scholarship student teachers. Clandinin (2010) said that the purpose "...is not to create spaces that educate us for fixed identities, fixed stories to live by. It is to create an education space in which teachers can compose stories to live by that allow them to shift who they are, and are becoming, as they attend to shifting subject matter." (p. 281-283).

Teaching Emotionality

Schutz and Zembylas (2009) postulated that teacher emotions are intimately connected to teachers' well-being, identity, and emotion regulation in teaching. In addition, teacher emotions act as "a key dimension in teachers' lives, especially in times of change." (Schutz & Zembylas, 2009; p. 370). As manifested in research, emotion "functions as the

‘glue’ for identity” (Haviland-Jones & Kahlbaugh, 2000, p. 294). Bullock (2013) states that emotions are powerful catalysts for actions that in turn can construct identity. Since a teaching practicum is usually a student teachers’ first-time classroom teaching experience, student teachers are expected to display “organizationally desired emotions” (Nichols et al., 2016, p.1), which involve commitment, resilience, and negotiations in the teaching profession.

Dilemmas in Teaching

Research reveals that teaching is dilemma-ridden (Cuban, 1992; Yin, 2015). According to Flett and Wallace (2005), a dilemma is “a situation in which the participants are required to manage competing alternatives” (p. 190). The complexities of teaching tend to be more severe among novice teachers—and particularly student teachers—who feel professionally inadequate in coping with emotional episodes related to teaching (Lindqvist, et al., 2017). As emotional labor for student teachers is intensive and intricate in light of their emergent professional identity formation, it is understandable that student teachers are prone to encounter dilemmatic spaces (Fransson & Grannäs, 2013), which contribute to their identity tensions (Pillen, Beijaard, & den Brock, 2013). As shown in the current research, there is a research gap between student teachers’ teaching practicums and the emotional dimension of their professional identity formation. To date, no scholars have examined Noyce student teachers’ professional identity development from the perspectives of micropolitical theory and positioning theory. Consequently, this research gap also forms the impetus for the proposed dissertation study.

Summary and Reflections

After reviewing the related literatures, a critical gap emerges between the equity-oriented and reform-minded programs and the student teachers' emergent professional identity formation. Meanwhile, there is no explicit study that examines how the STs exercise their agency and author their storied professional identities as they shift from teacher education context to the authentic classroom milieu. Overall, little systematic research on Chinese student teachers' practicum experiences exist. The dominant literatures on student teaching are produced by western educational researchers, such as Ken Zeichner (2010) and Sharon Feiman-Nemser (2001).

In particular, there is a paucity of research on these unique groups of "contract-restricted" preservice teacher' professional identities,⁹ especially how the student teachers construct their professional identities in the practicums. Arising out of this consideration, I seek to bridge the gap between former research on teachers' professional identity and the Chinese and American student teachers' professional through addressing the following queries:

(1) How do the reform-minded and equity-oriented teacher education programs affect their emergent professional identities?

(2) How do the Chinese and American student teachers craft professional identities by coming to grips with the respective program policies, mentorship, and the placements school contexts?

⁹ All the preservice teachers have to sign a service contract before officially entering the teacher education program. Per the contract, the preservice teachers have to work at least 10 years in the rural schools where they originally came from.

(3) How do the FTE and Noyce Scholarship student teachers improve their professional capacities by engaging in knowledge communities (Craig, 2007; Olson & Craig, 2002)?

(4) What are commonly shared threads underlying both the Chinese and American student teachers' professional identities associated with their learning to teach?

In this dissertation, I define professional identity as the way that student teachers perceive their professional roles and enact their responsibilities when engaged in the teaching practice aspects of teacher education programs. Teaching practicums contribute to student teachers' professional identity formation and are often considered the most valuable components in teacher education programs (Flores, 2013; Tang, 2003; Tang et al., 2016). Teaching practicums aim to provide student teachers with authentic experiences in teaching, which requires candidates to regulate their emotions and successfully resolve conceptual, pedagogical, and cultural dilemmas in student teaching (Windschitl, 2002; Yuan & Lee, 2016). In teaching practicums, student teachers learn to teach in various placement schools where they take on many professional responsibilities, including classroom teaching and management.

CHAPTER IV

METHODOLOGY

The world in which we live is a narrative world, created by and in our stories. We like to think that there is a world out there, quite concrete and objective and reliable, only to discover that thought, too, is just another story.

—Funk, 1988

Narrative Inquiry

As a relatively new and constantly evolving qualitative methodology, narrative inquiry is the study of experience understood narratively (Clandinin & Huber, 2005). Narrative inquiry follows a recursive, reflexive process of moving from field (with starting points in telling or living of stories) to field texts (data) to interim and final research texts (Clandinin & Huber, 2005). As narrative inquiry is being accepted internationally by more and more researchers, narrative inquirers understand that:

Narrative inquiry, the study of experience as story, then, is first and foremost a way of thinking about experience. Narrative inquiry as a methodology entails a view of the phenomenon. To use narrative inquiry methodology is to adopt a particular view of experience as phenomenon under study (Connelly & Clandinin, 2006, p. 375).

Following this line of thinking, narrative inquiry is a way of understanding and inquiring into experience through “collaboration between researcher and participants, over time, in a place or series of places, and in social interactions with milieus” (Clandinin & Connelly, 2000, p.20).

Three-dimensional Inquiry Space

Consistent with Dewey’s theorizing on experience and Schwab’s (1973) “practical”

genealogy, three commonplaces of experience, *temporality*, *sociality*, and *place*, specify multi-perspective dimensions of an inquiry and serve as a powerful methodological framework (Connelly & Clandinin, 2005). Accordingly, this dissertation unfurls on a past-present-future continuum (temporality), foregrounds human interaction (sociality) and unfolds in the distinguishable contexts (place).

Temporality

According to Connelly and Clandinin (2006), “events under study are in temporal transition” (p. 479). The importance of temporality in narrative inquiry comes from philosophical views of experience where the “formal quality of experience through time is [seen as] inherently narrative” (Crites, 1971, p. 291). Drawing on philosophers, such as Carr (1986), who explains that “we are composing and constantly revising our autobiographies as we go along” (p. 76), narrative inquirers attend to the temporality of their own and participants’ lives, as well as to the temporality of places, things, and events.

Sociality

Narrative inquirers attend to both the personal conditions and, simultaneously, to social conditions. By personal conditions, “we mean the feelings, hopes, desires, aesthetic reactions and moral dispositions” (Connelly & Clandinin, 2006, p.480) of the inquirer and participants. Social conditions refer to the milieu, the conditions under which people’s experiences and events are unfolding. The social conditions are understood, in part, in terms of cultural, social, institutional, and linguistic narratives.

Place

Connelly and Clandinin (2006) define place as “the specific concrete, physical and

topological boundaries of place or sequences of places where the inquiry and events take place” (p. 480). In this dissertation, the place concurrently occurs in the Chinese and American teacher education programs and the placement schools. In a expansive sense, place also extends to some critical boundaries that have intimate bearing with the professional identity construction.

Analytical Tools

Three analytical tools—broadening, burrowing, and storying and re-storying (Connelly & Clandinin, 1990)—help me to analyze and seam together the narrative materials that I will gather. With the assistance of these interpretive devices, I am able to transition my interim field texts into research texts (Connelly & Clandinin, 2000). Through broadening, I will situate both the Chinese and American student teachers’ practicum experiences not only in the literature having to do with professional identity and learning to teach, but also in their personal biographies as well, as reviewers are anticipated to see. By engaging in burrowing, my second research tool, I then repeatedly examine what bubbled to the surface when the student teachers connect their student teaching practice to divergent contexts. The third analytical tool, storying and re-storying, allows me to situate the student teachers’ evolving professional identities in their unfurling professional trajectory. Taken together, broadening, burrowing, and storying and re-storying are the original research tools used in school-based inquiries (Craig, 2015).

Story Constellations

In terms of organizing the story excerpts that I have collected, the “story constellations” approach will be adopted. “Story constellations” method is a narrative approach to

contextualizing teachers' professional experiences amid varying contexts. It consists of a flexible matrix of paired narratives that are broadened, burrowed, and re-storied over time (Craig, 2007). I presented the paired narratives in this dissertation from the participants' perspective—how the student teachers storied, lived, re-storied, and relived their student teaching practices during the practicums.

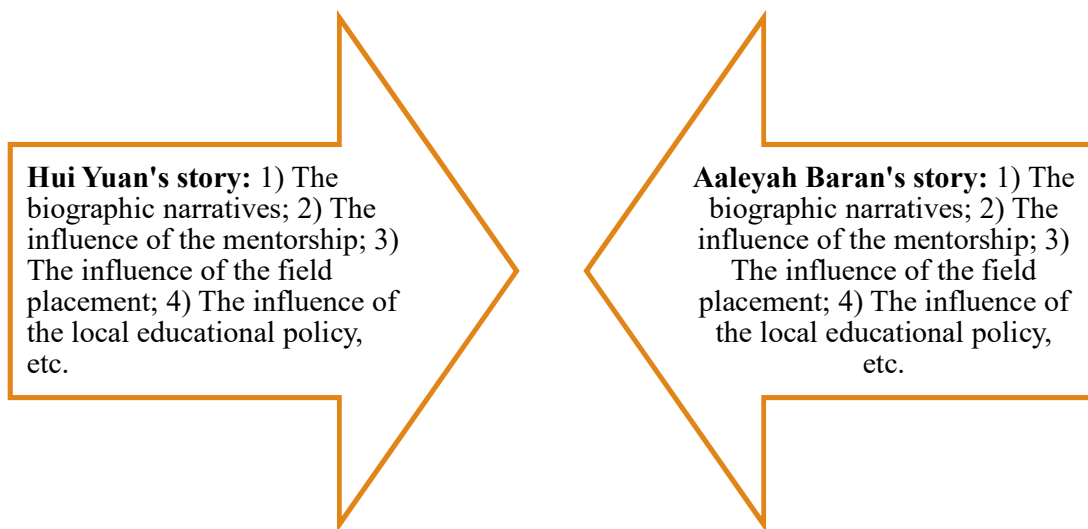


Figure 4: The paired narratives of the participants' stories to live by

In terms of story collection tools, open-ended interviews, reflective journals entries, practicum summaries, and teaching evaluations support the findings. Meanwhile, telephone interviews and email correspondences supplement the story collection. Field texts arising from these multiple sources were transformed into interim research texts by the manner of narrative inquiry's four interpretive tools: broadening, burrowing, storying and re-storying (Connelly & Clandinin, 1990) and fictionalization (Clandinin et al., 2006).

Narrative Exemplar

Taken together, this dissertation is presented in the form of narrative exemplars (Craig & Olson, 2002; Lyons & LaBoskey, 2002; Mishler, 1990) with reference to the student teachers'

professional identity formation. According to Lyons and LaBoskey (2002), narrative exemplars are “concrete examples...elaborated so that members of a relevant research community can judge for themselves their “trustworthiness” and the validity of observation, interpretations, etc.” (Lyons & LaBoskey, 2002, p. 20, italics, in original). These co-constructed exemplars, irrespective of the topic of investigation, share five characteristics in common. They: (1) capture intentional human actions that not only tell a story, but also convey developing knowledge of those involved; (2) are lodged in socially and contextually embedded situations; (3) draw other people into the mix as the narrative exemplar is unpacked; (4) implicate people’s identities; (5) focus on interpretation, often including different points of view (Lyons & LaBoskey, 2002).

In sum, a narrative exemplar presented in the format of story fragments, such as both the Chinese and American student teachers’ teaching stories, present for reflection and analysis a storied life lived in relationships with people, places and things. After collecting these narrative exemplars, I paired these strands of stories into “story constellations”.

Trustworthiness of Narrative Accounts

Different from the “T” truth embedded in conventional quantitative research, narrative inquiry texts seek truth-likeness (Bruner, 1986)—a sense of what is “true for now” (Bruner, 1987). In this scenario, trustworthiness depends on the experiences and perspectives readers bring to this dissertation and the resonances encountered with it (Craig, 2017). For this dissertation, I seek “narrative resonances” (Conle, 1996) between what the participants voiced and narrated about their personal and professional experiences and what I explored during the practicum period. I also tracked the participants’ multiple sources of written

reflections. Such resonances further added to the trustworthiness (Mishler, 1990) of this dissertation.

To avoid the unwarranted subjective opinions and distorted interpretations, I read and coded each transcript and then compared them to codes, categories, and interpretations conducted by my colleague (Hong, Greene & Lowery, 2016). Meanwhile, I utilized member-checks to increase the trustworthiness of this dissertation. Over the course of this dissertation, I sought a myriad of informal feedback from the participants pertinent to the interpretive validity.

Ethical Considerations

I secured Institutional Review Board (IRB) approval from the university before this dissertation project commenced (See Appendix 2 for the IRB approval certificate), and all the participants signed the consent forms (See appendix 3 for the Participation Agreement Form). Over the course of the research, I created safe environments for the participants and protected their private information. I utilized pseudonyms to assure the confidentiality of the research participants; their identities, and the universities and placement schools that were involved.

The Research Contexts

The Free Teacher Education (FTE) Program in China and the Noyce Scholarship Program in the U.S. act as the research contexts of this dissertation, respectively (See Figure 2). To attract highly-qualified teachers to hard-to-staff Chinese rural schools, in 2007, the Chinese government initiated the Free Teacher Education (FTE) program by offering entrants an appealing package of financial benefits (Ministry of Education, 2007). After graduation, FTE graduates are required to teach at least ten years in local primary or secondary schools.

These teaching positions are guaranteed by regional educational bureaus in their original provinces. More specifically, FTE graduates are obliged to teach in low-performing rural schools for the first two years. If they break the contract, FTE graduates are mandated to refund all the educational costs and pay a financial penalty (Ministry of Education, 2007).

Similarly, the Noyce program provides funding to institutions of higher education to provide scholarships, stipends, and programmatic support to recruit and prepare STEM majors and professionals to become K-12 teachers in the U.S. Scholarship and stipend recipients are required to complete two years of teaching in a high-need school district for each year of support. The program seeks to increase the number of K-12 teachers with strong STEM content knowledge to teach in challenging school districts. (National Science Foundation, 2005).

In particular, I selected the Next Generation STEM Program (pseudonym), which is one partner of the Noyce Scholarship Program, as the site for narrative exploration in the U.S. Next Generation STEM Program is a collaborative project of the university-based teacher education program with the local school districts. Next Generation STEM Program is committed to combatting the shortage of qualified STEM teachers in the U.S. and emphasizes robust field-based teaching experiences while students are working to attain a bachelor's degree in math or science. The goal of Next Generation STEM Program is to: (1) train undergraduates majoring in math and/or science to become high school mathematics and/or science teachers and leaders. (2) To ensure that the next generation of students will have mathematics and science teachers who inspire them to discover, to create, and to lead.

There are three rationales for selecting these two programs. First, both of these programs

share some essential similarities regarding the program goal, structure, and obligations. Both the Free Teacher Education (FTE) Program and the Noyce Scholarship Program are four-year university-based teacher education programs that aim to achieve education equity. In this scenario, these similar contexts ably provide an avenue for cross-cultural comparison. Second, there is scant research on how student teachers construct their professional identities against the backdrop of these two programs, which acts as an impetus to fill this research gap. Third, this international comparative study will generate implications on “pedagogy of identity” for China, the U.S., and other countries worldwide.

Table 2: The illustrations of the research contexts

Free Teacher Education Program (China)	Noyce Scholar Program (USA)
Goal: Improve Chinese rural education; bridge the increasingly wide rural-urban achievement gap in China.	Goal: Prepare STEM teacher workforce for high need high schools (urban schools) in the U.S.
Program characteristics: Four-year financial incentive teacher education program for rural education.	Program characteristic: Four-year financial incentive teacher education program for high-need schools.
Location: Mainly located in six top-ranking teacher education-oriented universities in China.	Location: Located in various public state universities throughout the U.S.
Program design: Subject matter knowledge in different disciplines, educational foundations courses, pedagogy courses, student teaching.	Program design: Subject matter knowledge in different disciplines, educational foundations courses, pedagogy courses, student teaching.
Benefits: Four-year free tuition fees, accommodation fees, and monthly stipend.	Benefits: Four-year free tuition fees and monthly stipend.
Obligation: Teach in low-performing rural schools where the entrants originated for ten consecutive years.	Obligation: Teach in low-performing urban high schools in the U.S. for at least two years.

Introducing the Research Questions

Against this theoretical and methodological backdrop, the overarching research question that guided this dissertation is: *How do the Chinese and American student teachers (re)construct their professional identities in their practicums?* To address this research question, five sub-research questions emerge over the course of inquiry:

- (1) What are the Chinese and American student teachers' motives and professional visions into the teacher education program, respectively?
- (2) How do the teacher education programs affect their professional identity perceptions?
- (3) How do the discursive field placement contexts affect the Chinese and American student teachers' professional identity formation during the practicums?
- (4) How do the cooperating teacher and the university supervisor dyad shape the participants' professional identities in the teaching practice?
- (5) How do the Chinese and American student teachers author their professional identities by engaging in multiple knowledge communities?

Introducing the Participants

I chose four participants for this dissertation project, who have varying family and academic backgrounds. In this way, I can balance the personal characteristics that are associated with the professional identity construction. The participants' biographic information is briefly displayed below:

Table 3: The biographies of the participants

Chinese STs	American STs
<p>Hui Yuan (Female): 21 years old who came from a lower-income family in Shaanxi province in China. Hui Yuan is earning her dual degrees in English language education and Chinese language education. Influenced by her parents and high school teacher. Hui Yuan entered the FTE program with a focus on English language education.</p> <p>Ding Yang (Female): 21 years old who grew up in suburban family in China. Ding Yang loves teaching and thought teaching was a suitable profession for her. Additionally, influenced by the financial support, Ding Yang entered the FTE program concentrating on Chinese language education.</p>	<p>Aaleyah Baran (Female): 21 years old who came from an Arabic American family in a major city in Mid-western city in the U.S. Aaleyah Baran majors in biology education in the Next Generation STEM program in a state public university. Aaleyah Baran practiced her teaching in one urban school in western part of the city.</p> <p>Francisco Garcia (Male): 21 years old who came from an Hispanic American family in a major city in Mid-western city in the U.S. Francisco Garcia's family originally comes from El Salvador. Grew up in an educational family, Francisco Garcia majors in science education in a state public university.</p>

Hui Yuan

Hui Yuan is a 21-year-old Chinese female. She was born into and grew up in a low-income household in Shaanxi province in the western part of Mainland China. Following her high-school teacher's and parents' advice, Hui Yuan chose the Free Teacher Education Program in a prestigious university in China. Hui Yuan conjectured that she might enjoy an assortment of benefits, such as stable working environment, satisfying salary, and guaranteed summer and winter holidays if she chose to enter the teaching profession. This utilitarian choice improved her possibility of being accepted by a high-ranking university in China. Meanwhile, Hui Yuan assumed the teaching profession was suitable for females because of the stable working environment. Furthermore, Hui Yuan shared that the teaching profession in China can offer increasingly satisfactory salary in addition to the guaranteed winter and

summer holidays. With these in mind, Hui Yuan entered the Free Teacher Education program with a focus on English language education. Hui Yuan was earning her dual degrees in English education and Chinese language when I interviewed her from 2016 to 2017.

Ding Yang

Grew up in an urban community in the northern part of China. She finished her K-12 education in urban schools in her hometown. Before her student teaching, Ding Yang worked as a part-time Chinese language teacher in several educational companies in Beijing, China. Ding Yang stated that she accidentally came across the recruitment announcement of the Free Teacher Education Program in a prestigious teacher education university in China: New Oriental University (pseudonym). Ding Yang's friends suggested that if she chose the Free Teacher Education Program, she had a greater possibility of being accepted by a better university. Ding Yang also wanted to work as a teacher. Finally, following her parents' advice, Ding Yang entered the Free Teacher Education Program in the New Oriental University.

Aaleyah Baran

Aaleyah Baran is a female Arab American who was born and grew up in a mid-western major metropolitan city. Her parents were middle eastern Muslim immigrants. Aaleyah majored in biology at a state public university. As teaching is a highly-respected career in her culture, Aaleyah said that she had passion for teaching at a very early age. Moreover, Aaleyah was fascinated by science during her early school years. Therefore, Aaleyah applied for the Noyce Scholarship within the Next Generation STEM program. Aaleyah student taught in one urban school in the western part of the city where she studies.

Francisco Garcia

Francisco Garcia's parents are from El Salvador, and they lived in the U.S. for about ten years. Francisco Garcia's grandparents taught science in a college in El Salvador and exerted a great influence on his passion on science. Meanwhile, Francisco Garcia's extended family members were deeply involved in science research and education. Therefore, Francisco had cultivated his enthusiasm for science at a very early age. As Francisco Garcia shared, "My parents always let me do what I want to do. They always support anything I do...[my parents told me that] you can decide anything you want to do." Raised in this open and supportive family, Francisco Garcia naturally developed his interests in biology.

CHAPTER V

FINDINGS

In this chapter, I storied and re-storied four student teachers' (Hui Yuan, Ding Yang, Aaleyah Beran, Francisco Garcia) "stories to live by" by employing the story constellations (Craig, 2007) approach to narrative inquiry. Situated in the three-dimensional narrative spaces, each participant had different orientations, critical events, story plotlines, and the corresponding reflections arising from their teaching practicum experiences (Figure 5). However, there were some commonly shared story threads underlying these four participants' teaching stories in varying contexts, which contribute to the sophisticated understandings of the convergence and divergence of their professional identity formation.

In this chapter, I narrated the four participants' stories to live by as they unfurled on their professional knowledge landscapes with multiple sources of raw narrative excerpts for each individual. The four participants' stories to live by include their "student teaching stories" (i.e., the participants storied their teaching practices in their own terms and respective vantage points) and "stories of student teaching" (i.e., I narrated the participants' teaching stories from my own standpoint) in the form of narrative exemplars. The research tools underpinning these narrative exemplars include open-ended interviews, written reflections, and practicum reports, which triangulate with each other and guarantee the trustworthiness of this dissertation project. After presenting each participant's story fragments, I created a coda to dig more deeply into the contextual affordances and constraints associated with each participant's professional identity construction during their practicum experiences.



Figure 5: The story constellations of the four participants' stories to live by

Hui Yuan

Hui Yuan's placement school was a foreign language experimental middle school with a middle academic ranking in Shanxi Province, China. Hui Yuan originally comes from Shanxi Province. Therefore, according to the regulation of the FTE program, Hui Yuan had to student teach in the middle and high schools in her original province. Hui Yuan explained that her practicum responsibilities involved three areas: 1) English subject matter teaching, 2) school administrative service, and 3) head teacher service (mainly managing the classroom and organizing student activities). Hui Yuan shared several critical events associated with her stories to live by, which included: 1) the influence of the mentorship, 2) reality shock, 3) the micropolitics of the school, and 4) the forge of the personal practical knowledge. Accordingly, I will expand each piece of story with the corresponding evidences.

The Influence of the Mentorship

Influenced by traditional Chinese culture, mentorship in China follows a typical

pedagogical modeling accompanied by a hierarchical power relationship. Meanwhile, the mentorship mainly revolves around the refinement of pedagogical skills, classroom management, and student service issues. Hui Yuan narrated that at the beginning of the teaching practicum, she felt both curious and excited. She thought the placement school was an ideal place for her student teaching because it was near her home. When she first saw the cooperating teacher, Hui Yuan found the mentor teacher was quite approachable. Intriguingly, the cooperating teacher gave each student a nickname in her English class, and the classroom atmosphere was quite pleasant. Hui Yuan found that the cooperating teacher had a very harmonious relationship with the students, and she wanted to model her practice in building the relationship with the students:

The cooperating teacher was magic in teaching. She ostensibly did not teach much in the classroom, which was evidenced by her little writing on the blackboard and a few assignments to the students. The students learned English happily in the classroom. However, the cooperating teacher well covered the key knowledge points in English. For instance, when she taught the usage of comparative adverbs and adjectives, the cooperating teacher would ask the students to write sentences on the blackboard ahead of all the students. Then the students would use adjectives, such as “taller,” “smarter,” and “faster.” Thus, the whole class was exuberant, and the students learned this English language knowledge content effectively.

This piece of narrative shows that Hui Yuan was deeply inspired by her cooperating teacher’s pedagogical approach to English language education. Hui Yuan deeply admired her mentor teacher and how she instructed her students more effectively and created a stimulating classroom environment. Hui Yuan further mentioned that her mentor teacher, as a veteran English language teacher in the placement school for many years, was quite helpful in her teaching development:

The mentor teacher always readily helped me to analyze and synthesize the key knowledge points in the English textbook, reorganize different modules, distill the

essential knowledge, and teach them effectively to the students. When teaching the fast-track students and slow-track students, I designed different lesson plans and taught them differently. Moreover, the cooperating teacher taught me how to manage the classroom effectively—how to cope with students with different personalities, how to engage in conversations with students, and how to make the students more obedient.

This narrative exemplar confirms that Hui Yuan's mentorship mainly centered on the development of teaching skills and the management of the classroom. From the lens of professional identity construction, these knowledge and skills oriented professional experiences formed the fabric of Hui Yuan's "stories to live by" during most of her student teaching period.

Reality Shock

Hui Yuan encountered three areas of reality shock over the course of her student teaching: 1) failure in first-time teaching, 2) professional inadequacy in classroom management, and 3) negotiation between personal and professional identities. In the forthcoming section, Hui Yuan storied and re-storied her related practicum experiences:

I felt frustrated about my first-time teaching and cried. The experience was horrible. When I was stuck in my teaching activities in the classroom, the cooperating teacher stopped me and the whole class students laughed at my grave mistakes. I felt rather embarrassed then...From time to time, I suspected myself if I can work as a competent teacher.

The first story fragment reveals that Hui Yuan felt frustrated about her first-time teaching. To make things worse, Hui Yuan's mentor teacher and the students she taught did not give her timely support when she was stuck in the vexing teaching situation. Hui Yuan continued to illustrate her teaching-related activities:

I felt incompetent in classroom management...The cooperating teacher told me that if I did not cultivate my authority in the classroom, it was difficult to manage the classroom... The main problem was that the classroom was noisy. Embarrassingly, I was introverted and easy to be shy. Thus, I lacked the firm and confident attitude

towards the students compared with my cooperating teacher.

Hui Yuan's heart-felt incompetency in classroom management arose from her struggle in building her authority in front of the students in the classroom due to her introverted personality. Hui Yuan assumed these negative factors stifled the formation of her professional identity as a qualified teacher. Regarding the shift of her professional identity from "a college student" to "an eligible teacher," Hui Yuan went on sharing a pertinent story occurring in the field placement:

When the placement school held the sport games, I wanted to play table tennis with the students, and we went to look for the court. Unfortunately, several high schoolers approached to us and said: "We want to use this Ping Pong table [tennis table] first. Is that OK?" Oddly, the high voice shocked us. The student I taught looked at me with hesitation and said: "In this case, can we give up the Ping Pong table and let them play first?" Finally, we left the court. This event invoked my confusing emotion. I assumed that the high schoolers did not tell that I was a teacher then. Additionally, this event made me realize that I need to shift my identity and mindset. I should keep some distance from the students. Otherwise, it was difficult to be a full-fledged teacher in the Chinese socio-cultural background.

This emotionally-charged narrative exemplar stated above demonstrates that Hui Yuan reflected on the dynamics between her personal and professional identities during student teaching. On one hand, Hui Yuan desired to support students in her leisure time. On the other hand, Hui Yuan had to keep psychological distance from her students in order to act more like a formal teacher. This professional experience contributes to the tension of his professional identity construction, namely, working as a student and a teacher simultaneously, during the practicum.

The Micropolitics of the School

From the perspective of the micropolitical theory, schools are essentially political

organizations (Blasé, 1991), and becoming a teacher is a political endeavor which involves the continuous negotiation of different power relationships (Kelchtermans & Ballet, 2002).

One recurring plotline that underlines Hui Yuan's practicum experience was the influence of the micropolitics of the placement school on her stories to live by:

At the middle of practicum period, I felt physically and mentally tired. Many teachers from different departments in the school began to "borrow" me continually. They asked me to do many trivial office jobs. To make things worse, I had to grade many assignments each day, which far exceeded my main responsibility as a student teacher in the field placement, such as English teaching.

As shown in this narrative, many teachers in the placement school considered Hui Yuan as "free labor" and continually took advantage of her. Arguably, the micropolitics of the placement school exerted a great influence on Hui Yuan's "stories to live by":

During the breaks this morning, one boy's wrist was broken suddenly when he was playing with another one. Misfortunes never come singly. When a girl pushed a boy, the boy's hand was hurt. Facing these emergencies, the cooperating teacher told me how to tackle them by communicating with the parents. I was totally startled then. I never expected that I need to interact with so many kinds of people including medical doctors, policemen, and the parents.

This story fragment implies the emergency that occurred in the placement school, which made Hui Yuan realize that sometimes she had to communicate with different kinds of personnel, including medical doctors, policemen, and the parents. This emerging issue also expanded Hui Yuan's perception of teachers' roles and responsibilities.

Personal Practical Knowledge

While dealing with the relationships with the students, Hui Yuan illustrated her personal practical knowledge that she developed in the placement school:

I found several students in the class had romantic relationships. As for this issue, I did not purposely prevent them, given this kind of puppy love could sometimes booster the students' motivations for learning. Recently, I found one male student in my class

studied harder than before. Later, I learned that he wanted to leave a good impression on his “girlfriend” by working hard.

Hui Yuan’s personal practical knowledge not only helped her perceive the romantic relationships among the students in a different perspective, but also facilitated her productive instructional relationships with the students. However, Hui Yuan also encountered some dilemmas regarding her teaching practice below:

The question that I encountered was how to be a teacher with a sense of justice. When I manage the students’ misbehaviors in the classroom, how can I treat them fairly? When I teach the fast-track class, the students have persistent passion in learning and inquiring into questions they had. They even ask questions from me after the class. On the contrary, the slow-track students do not ask questions in the class. I can identify that they were not interested in learning at all. Some teachers commented that these students are stupid and they were struggling with learning all the time. It seems that the teachers take them for granted and turned a blind eye to them.

This concern for social justice in teaching prompted Hui Yuan to reflect on her professional identity—how to treat different tracks of students fairly. Numerous Chinese public schools implement an academic tracking policy, which assigns students into different classes based on their scholarly performances. This contextual policy constrained Hui Yuan’s professional identity formation during the practicum—how to facilitate teaching equity on her professional knowledge landscape.

Coda

The major story threads underlying Hui Yuan’s professional identities are presented in Figure 6 below. As evident in her student teaching stories, Hui Yuan’s learning to teach journey is full of uncertainties and challenges, which formed the tension of her “stories to live by.”



Figure 6: The major story threads underlying Hui Yuan's professional identities

While narrating her professional experiences, Hui Yuan touched on a series of contextual factors contributing to her professional identity construction (Figure 6). Furthermore, Hui Yuan elucidated the vicissitude of her emotions associated with teaching, which foregrounds the emotionality of her teaching and professional identity formation. Hui Yuan shared two of her journal entries below:

I reflected that all these confusions, frustrations, and regrets are natural parts of the practicum experiences, which will facilitate me to be a better teacher and improve the working efficiency in the following days. Also, I realized that teaching is only part of a teacher's life. As a whole person, I should enrich my personal life by cooking, learning a new language, and exercising.

Overall, I felt regretful that I did not engage in the teaching practicum wholeheartedly due to the distractions from job seeking. After I signed the teaching contract with the local bureau of educational administration, I felt hesitant about my career choice in a local elementary school, which went against my initial career plan. I did not like elementary school and wanted to teach in a middle or high school. This negative emotion caused me to feel burn out in my teaching practicum.

These two narratives show that student teaching is not only replete with emotional change and negotiation of power relationships, but also the professional identity construction—the continuous seeking of “best-loved self” (Craig, 2013)—within the professional knowledge landscape. The reality shock and the dilemma of teaching constitute organic parts of Hui Yuan’s practicum experience, which further became meshed into her malleable professional identity. Hui Yuan’s interviews and written reflections corroborate Timoštšuk and Ugaste’s (2010) claim that student teachers normally emphasize failure or success rather than what they had or had not learned. Hui Yuan’s narrative exemplars also reveal that student teachers’ professional identity construction is essentially socio-cultural—it unfurls within multiple dimensions of contexts and professional relationships.

Ding Yang

The Emotionality of Teaching

Regarding the vicissitude of the emotional change during the teaching practicum, Ding Yang had eagerness and anxiety at the beginning of the student teaching. She illustrated that, “I always imagined the identity shifting from a college student to a teacher. I was thinking about how I can take advantage of the leading theory that I learned in the university. Yet, I felt anxious simultaneously, which mainly derived from the uncertainties ahead of me.” During the first month of the practicum, Ding Yang became totally familiar with the life in the placement school and was full of enthusiasm. Ding Yang repeatedly refined her lesson plan, practiced teaching in the classroom, practiced her blackboard writing, and sought feedback from her cohort peers. In sum, Ding Yang noted, “All that I did was to make my teaching more perfect. To establish affinity with the students, I talked with the students about

their assignments, study and life in their spare time. Since I had a similar age to them, they enjoyed sharing their inner feelings with me.”

Like Hui Yuan, Ding Yang experienced the reality shock in her first-time teaching. Ding Yang shared that after the first-time teaching in the classroom, the cooperating teacher pointed out many weaknesses in her teaching:

The students that I taught were not high-performing. To my frustration, they always wrote their assignments carelessly. But I kept encouraging them and offered positive feedback. This did not work instantly. Unexpectedly, one month later, I surprisingly found some students worked on their homework diligently, which was evidenced by their in-depth thinking. Some students began to communicate with me about learning. Even one silent student asked me questions while taking notes. Then I had a sense of fulfillment.

Ding Yang also felt shocked and embarrassed amid her student teaching. Ding Yang shared that, as the practicum continued, she felt she was busy maneuvering all kinds of tasks including teaching, classroom management, and school-wide service:

I felt really pressured and thus sleepless sometimes. I had to tackle so many things simultaneously! However, the placement school did not take this into account and still assigned much administrative work to me. I felt angry and helpless. Gradually, I changed from a committed teacher to a lazy one.

There is a turning point when the job affair approached. I became hasty and everything went out of control. On one hand, I had to go through the daily teaching activities, administer the mid-term tests and grade; on the other hand, I had to prepare for the job interview and teaching demonstrations.

Toward the end of the student teaching, Ding Yang described how she had to fill out all kinds of practicum evaluation forms:

There were so many forms to finish that many of the student teachers felt uneasy and even irritable. I spent one week in total on working on these required forms.

To finish the practicum assessment task, Ding Yang had to complete an assortment of evaluation forms, which constitutes the thread of “cover story” for her student teaching.

Besides filling out the forms, Ding Yang also shared that, “During the last day of the teaching practicum, she left the placement school quietly and did not say farewell to the students, for she did not try best to assume my responsibility, and I felt regretful to them.”

The Placement School

Overall, Ding Yang’s placement school did not perform well academically. Yet, the students there were willing to learn. Therefore, Ding Yang stated that it was easy to deal with the students there. Regarding the main tasks that she finished in the placement school, Ding Yang shared the following experience:

I have designed the lesson plans, revised and taught them. Meanwhile, I also engaged in some instructional administrative activities in the placement school. Because there were not enough teachers there, I had to support them.

Like other Chinese student teachers, Ding Yang assumed a broad variety of responsibilities in the placement school, such as monitoring the exams and mentoring students’ assignments. Sometimes, Ding Yang felt the only difference between the regular teachers in the school and her was salary.

Gang Zhu: I know formal teachers have many responsibilities in their daily practice. In this case, they always ask some help from the students. Thus, many students said that they always did some simple, repetitive, and boring jobs. It is meaningless because the student teachers cannot learn anything valuable from these activities. Do you have a similar situation?

Ding Yang: We have teaching and research activities in the placement school. Immediately after that, I have to write the report. Besides, I have to monitor the exams. There are two exams in the morning and two in the afternoon. Each formal teacher is required to monitor two exams, and student teachers four exams. Later, some student teachers need to attend the job fairs. However, the placement school did not care about it. Some student teachers have to monitor four exams each day.

Although she engaged in some school-based teacher development events, such as collective

class preparation activities, Ding Yang thought they were superficial and not necessarily useful for her professional development. However, Ding Yang concluded that some class preparation and refinement activities were beneficial as our conversation below suggests:

Gang Zhu: Did you participate in some class preparation and refinement events? How do you perceive the influence of these activities on your professional development?

Ding Yang: I attended some inter-school teaching and research activities in the local school district, through which I broadened my horizon and learned new ideas.

Regarding the administration in the placement school, Ding Yang told me that the administration of the placement school was supportive. In her view, the principal tried his best to satisfy the student teachers' professional needs. Also, the principal valued their feedback and advice. However, other middle-level school administrators always asked the student teachers to do some service jobs, such as monitoring the exams, which speaks to the micropolitics of the placement school.

Personal Practical Knowledge

In terms of the subject matter knowledge, Ding Yang indicated that students have multiple approaches to accessing knowledge, such as reading and referring to abundant online information. However, different from most of the middle school subjects, Ding Yang realized that the Chinese language education is a continuous process of human cultivation:

It is not enough to only focus on technical knowledge. On the contrary, students need to find and experience all kinds of nuances of intricacies. Only in the reading process, can students experience the authors' emotional feelings. Students will be inspired by the manner of interactive reading.

From Ding Yang's vantage point, Chinese language education needs more task-oriented and explorative learning activities to guide students. She further specified that the current widely-

adopted Chinese language education pedagogy, characterized by mechanical text analysis, is outdated and should be abandoned. During the practicum, Ding Yang realized that Chinese language education is not merely about knowledge transfer, for knowledge is only one aspect of concern. More in depth, Chinese language education is more about humanity exploration, feeling, and appreciation. Ding Yang thinks the humanity feature of the Chinese language education distinguishes it from other disciplines. For this reason, Ding Yang assumes that the Chinese language education needs more participatory learning activities.

Knowledge Communities

Over the course of student teaching, Ding Yang formed knowledge communities with her colleagues, where they helped and supported each other through storying and re-storying their experiences amid the field placement context. Ding Yang felt that this kind of collegial relationship was instrumental in facilitating their professional growth and even protect their professional vulnerability (Kelchtermans, 2005, 2009). For this aspect, Ding Yang shared that:

When you teach in an unfamiliar school, many teachers here considered me as an outsider rather than a constitute part of the community. Many people were indifferent to me. However, we student teachers with the same age came here from the same university and shared the same purpose (i.e., learn to teach). Thus, we can support each other.

Within her knowledge communities, Ding Yang narrated that she communicated her professional experiences with her colleagues in the office. The multiple knowledge communities ably provide safe places where Ding Yang shared her ways of knowing, doing, and being with other student teachers in the field placement. Furthermore, theses knowledge communities rendered Ding Yang to author her narrative authority (Olsen & Craig, 2005)

amid the learning-to-teach contexts. For instance, when her classroom instruction needed to be video-recorded for later reflection, Ding Yang would ask her colleagues for help. They also shared their teaching experiences and methods and how to cope with the students. When some of her colleagues asked for leave due to job interviews, they would support each other. When the student teachers had no time for lunch, their colleagues would bring them food. From Ding Yang's vantage point, these knowledge communities provided safe places for professional and emotional support (Craig, 1995).

Intriguingly, Ding Yang elucidated her knowledge communities that she also formed with the students. The placement school held a Long March Memorial Walking event, and each participant was required to walk 25 kilometers. During the walking process, Ding Yang talked about some topics that the students and her would not address in the classroom otherwise, and they continually shared interesting topics along the mark. Gradually, Ding Yang found that she developed deep connections with the participating students. Ding Yang thought these knowledge communities greatly empowered her professional identity formation—how to gain strength from student communities of knowing to become a qualified teacher.

Influence of the University Supervisor

During her student teaching period, the university supervisor only went to the placement school once to check if the teaching was going well. Each student teacher had three university supervisors. Yet, all these three supervisors were in charge of the student teachers' logistic issues. One supervisor had the responsibility of signing the practicum reports. Apart from these, the university supervisors did not give the student teachers

sufficient guidance on teaching. For this reason, Ding Yang explained:

The university supervisors are not familiar with the K-12 textbooks and teaching. Meanwhile, the university supervisors have taught in the college for a long time, and they do not have the obligation to become familiar with the students and the instruction in the K-12 schools. For this reason, we did not have many contacts nor specific conversations with the university supervisors. Only after we came back from the placement schools, would we contact the university supervisors. Over the course of our student teaching, we only reported our safety to the university supervisor. Overall, I do not think the university supervisor played an essential role in our student teaching, although they are pretty polite.

Ding Yang's interaction pattern with her university supervisor confirms that university supervisors are considered as "representatives of learning theory" and cooperating teachers as "content knowledge experts." (Wang & Clarke, 2014, p. 114). This disjuncture not only arises from an institutional disconnection between universities and schools, but also from different epistemological views on learning to teach: the university supervisor is in charge of theory and the school-based mentor teachers are in charge of practice.

Dual Identity Positioning

Over the course of student teaching, Ding Yang consciously or unconsciously considered herself as a "student" and a "teacher" at the same time. For this dual identity positioning, Ding Yang illustrated her professional identity dualism below:

Gang Zhu: Did you find any changes in your identity perceptions during the practicum?

Ding Yang: I feel I am a student when I interact with the teachers in the placement school and a teacher with my students. For the placement school, I am an outsider. Although I am called a teacher by the students, I am not essentially a teacher in the placement school. Thus, I feel awkward regarding my professional identity in the practicum. The students there did not consider me as a teacher. The students are very smart nowadays. They only selectively follow what I said. Overall, I do not have a clear understanding about my professional identity.

Ding Yang's Discourse represents her dual professional identity: a student and a teacher in

the placement school simultaneously. Ding Yang's Discourse embodies her comparative identity positioning. On one hand, Ding Yang's interactions with the students are different, for she is not a formal teacher in the placement school. On the other hand, Ding Yang realized that the authority of teachers has changed dramatically because information and knowledge had been increasingly expanding exponentially in recent decades, and teachers are not the sole source of knowledge in classroom teaching context.

Embodied Metaphor: From Fly to Butterfly

Ding Yang initially likened herself to a fly at the inception of student teaching. Literally, Ding Yang acknowledged that she felt directionless at the initial teaching practice, and she had no specific route to follow; hence, she buzzed around—flew aimlessly.

I felt I was a fly during the student teaching... There is a turning point when the job affair approached. I became hasty and everything went out of control. On one hand, I had to go through the daily teaching activities, administer the mid-term tests and grade; on the other hand, I had to prepare the job interview and teaching demonstration. I felt really pressured and thus sleepless sometimes. I had to tackle so many things simultaneously! However, the placement school did not take this into account and still assigned much administrative work to me. I felt angry and helpless. Gradually, I changed from a committed teacher to a lazy one.

Ding Yang only sensed that she had to fly ahead and work hard. Later, after she became familiar with the daily instructional routine in the field placement, Ding Yang said that she felt more like a butterfly and could fly freely. Ding Yang admitted that she could better navigate the learning-to-teach process.

Although she assumed numerous part-time teaching positions prior to student teaching, Ding Yang spent most of her time in the university and had very limited authentic experience in teaching and mentoring. All in all, Ding Yang still thought she was a college student. Meanwhile, Ding Yang realized what she learned from the university coursework was quite

theoretical and lacking in opportunities for operationalization and actualization. Ding Yang explained her thinking this way:

It is difficult to implement what I learned from the teacher education program. It is not enough to recite the theories and principles in the textbook. My university has a very cutting-edge educational theory, and I mastered them in the learning process. However, I realized that I did not have adequate experience to bolster these theories. Eventually, these sound ideas did not function well without the aid of concrete teaching experience. After the practicum, I further consolidated myself and reflected on how to better merge the theory and practice it in my classroom.

Coda

During the post-practicum period, Ding Yang employed the embodied metaphor from fly to butterfly to elucidate her perceptions on the shift of her professional identity.

Emotionally, Ding Yang felt directionless and unconfident at the beginning of her student teaching. However, as she accumulated more and more teaching experiences, Ding Yang felt that she looked more like a butterfly—She became more adept at and confident in teaching.

In another journal entry, Ding Yang described herself through another metaphor—a farmer:

I felt I was a farmer. It was a tiring job. I had to weed out the bad things in the students (like weeds). I had to effectively mentor the students in a broad array of complex contexts. I had to water and fertilize them. After I worked for one year, I can harvest the fruits. However, the gain is ephemeral, and the commitment is always required.

After the practicum, Ding Yang mainly reflected on the dialectic between theory and practice in becoming a teacher—a perennial disconnection that played out in her journal all the time. This institutional dichotomy between university and school around Ding Yang further exacerbated the deep-rooted division between theory and practice. As Ding Yang shared, the university supervisor could not effectively mentor teaching in high schools because she was not familiar with the textbook and the characteristics of the high school students. The university did not ask her to engage in specific mentorship. Simultaneously,

mentor teachers are required to connect sophisticated theory with teaching practice. It is the mentor teachers who support mentees in refining the teaching practice and managing the classroom.

As manifested in Ding Yang's stories, there was no dialogue between the mentor teacher and the university supervisor regarding the preparation of the student teachers. Due to the institutional discrepancy, the university supervisors only took part in some general issues of practicums (e.g., signing the evaluation forms and the reports), and they did not play any expected role in the practicum.¹⁰ On the other side, the Chinese mentor teachers are usually rich in practice and inadequate in theory. All these aspects contribute to the tensions of Ding Yang's professional identity construction.

Compared with lesson planning, Ding Yang thought that job seeking was more important. It was difficult to transfer to another school after she secured a position in one school. Accordingly, Ding Yang often asked for leave and went to job fairs. This distraction made it difficult for Ding Yang to be committed to teaching. However, teaching practicum, as a required component for all preservice teachers, accounts for four credits. Arguably, it is very important for her professional development. The negative side of evaluation, however, is that student teachers are required to submit about 15-16 teaching summary forms.

Unfortunately, Ding Yang did not finish these reports on a daily basis. Whenever she created the evaluation reports, Ding Yang had to fabricate some teaching experiences to meet the student teaching evaluation requirement, which constituted the cover stories (Olsen & Craig,

¹⁰ In Mainland China, most of the university supervisors are normally subject matter course instructors in respective colleges or departments.

2005) of her teaching practicums.

After the practicum, Ding Yang reflected that one advantage of the position of student teachers is that they enjoy a higher degree of autonomy compared to the teachers in the school. Ding Yang summed up her observation this way: “You can do many things and ask many people. You are not rigidly restricted by the system.” For this reason, Ding Yang assumed that she was afforded more opportunities to mold herself professionally.

Ding Yang reflected that the major challenges in her practicum are time control in teaching and professional inadequacy in teaching and classroom management. Besides these, Ding Yang found some other belief changes after her student teaching:

Ding Yang: What I learned from the teacher education program is cutting edge in this country. However, it is easy to implement them in Beijing and hard in other provinces. If you stick to these ideas all the time, it will be difficult to find a job. More importantly, it is impossible to teach with these idealistic philosophies. Later, I found a more feasible way—Don’t give up these advanced ideas. However, I connected them with quality and test-oriented education in the school I teach. Personally, I have to use these ideas intelligently to fit the schools where I will teach.

Gang Zhu: Can you please give me a concrete example?

Ding Yang: During my college period, I learned theme-based teaching, which is a very good idea. For instance, I learned flipping classroom instructional approach. However, it was difficult to enact in middle schools. The students do not have adequate knowledge base and passion to learn in the flipped classroom. You have to teach them based on the textbook.

In terms of the constraints on implementing more progressive teaching in the classroom, Ding Yang specified that she did not have much power in the educational system.

On one hand, Ding Yang admitted that the Chinese educational system per se has some problems, such as overemphasis on high-stakes tests and narrow teacher evaluation.

Therefore, Ding Yang was not able to implement an innovative instructional model in

Chinese language education, such as inquiry and theme-based learning. On the other hand,

Ding Yang had to adopt the traditional teaching method, such as worksheets and seated-work, to finish her teaching tasks. Consequently, there was a division between what Ding Yang learned from her teacher education coursework and her actually-enacted pedagogies during the teaching practicum.

Another source of obstacle is that Ding Yang found that more experienced teachers, especially the veteran teachers, can teach according to their valued educational philosophy. Ding Yang found that the students taught by these experienced teachers performed well in the National College Admission Tests. In contrast, as a student teacher, Ding Yang did not think she enjoy this privilege to enact her preferred teaching approach. Consequently, Ding Yang enjoyed limited autonomy in her teaching practice. Overall, the major story threads underpinning Ding Yang’s professional identities are displayed in Figure 7.



Figure 7: The major story threads underlying Ding Yang’s professional identities

Aaleyah Baran

The Influence of the Mentorship

Aaleyah's mentor teacher had taught for over a decade. However, this is her second year to teach biology in a high school. Prior to this appointment, her mentor taught in elementary and middle schools before transitioning to a high school. When talking about her mentor teacher, Aaleyah was satisfied with her mentorship and effectiveness in the classroom.

Aaleyah viewed her mentor as being "very involved in students...definitely a great teacher...very passionate about teaching." Aaleyah also readily shared that mentorship was not only confined to the school where she student taught and did not end after the student teaching. They have kept in touch with each other even after Aaleyah finished the teaching practicum:

It was great! I love being there. I enjoyed that semester a lot. It was not merely a good mentorship, but it was also good outside the school... Even now, she texts me on graduation: "Hey! Congratulations on graduating! If you need anything, let me know." It was a good semester. I felt very comfortable!

Overall, Aaleyah thought her mentor teacher was supportive and democratic in introducing her to the classroom. A telling example is that when the mentor first introduced her to the students, she did not state, "This is our new *student teacher*." Rather, the mentor teacher said, "This is Ms. Baran. She will teach you biology this semester." From Aaleyah's perspective, this introduction did not show the students that Aaleyah was a *student teacher* or imply that she was still learning in the science teacher education program. Aaleyah reflected that this equity-oriented introduction made her feel more like a *teacher* as opposed to an *intern*, which helped create an equal relationship with her mentor teacher. Therefore, the students considered Aaleyah as another biology teacher equal to their current biology teacher.

More specifically, Aaleyah reflected that, “They [the students] did not know I was a student. I feel if they knew I was a student teacher, they would look down on me.” Meanwhile, with the support of her mentor, Aaleyah could learn to teach within a very encouraging environment:

Absolutely! She never says do not try that. When I try something new, she always says try it out. If it does not work, just try it out. She was very supportive. She always pushes me to do better. Give me feedback every time I thought I made a mistake. After a lesson, when I do better, she would give me feedback. I never felt discouraged.

Due to her mentor teacher’s kind support, Aaleyah could continually try new teaching methods and systematically forge her teaching style. During the interview, Aaleyah illustrated that she developed an inductive instructional method in her biology class. For this aspect of teaching, Aaleyah explained that:

They try to find out solutions before we give them. It is said that if students can come up with conclusions on their own, they can better remember the knowledge and implement the materials later on. If students can come up with conclusions on their own, you do not have to tell them the answers.

From this except, it can be inferred that Aaleyah gradually forged a *constructivism-oriented professional identity*. Aaleyah found that it was not pedagogically appropriate to implement drill and practice in her biology class. She relentlessly encouraged the students’ critical and independent thinking abilities. To achieve this end, Aaleyah initiated “inductive teaching” method in her biology classroom and created intellectually-stimulating opportunities for student to draw conclusions themselves. In this way, Aaleyah could work as a learning facilitator and a guide in her biology classroom. However, Aaleyah acknowledged that it was challenging for the mentor teacher to implement differentiated instruction. For this point, Aaleyah elucidated that:

But there [was] no differentiation. I think she believes in differentiation, but it is very hard to differentiate the materials in the team. You have to work alongside other teachers.

I think that is the biggest problem. There is little differentiation.

Aaleyah analyzed that the conundrum of differentiated instruction embodied the chasm between her mentor teacher's agency (e.g., willingness to implement differentiated instruction) and the less-than-advantageous culture of the placement school (e.g., limited teacher collaboration, restrictive administrative support, and low resource accessibility). This dichotomy also created? Aaleyah into a professional identity formation dilemma: Should she conform to the current practice in the placement school or should she initiate differentiated instruction independently?

Emotional Support

During her student-teaching period, Aaleyah recounted that she encountered tough situations, such as students' disengagement over the course of biology learning. Intriguingly, these challenging circumstances did not trump Aaleyah's resilience and passion for biology teaching. On the contrary, Aaleyah developed a more nuanced understanding about the distinct differences among the students:

...Student have different lives. They come from different backgrounds. There are a lot of going on outside schools. You never know what students will react on certain days. Some days my lesson went bad because the students did not pay attention. They were off task. Those days were hard. Students did not learn anything from that class period. I felt really upset. My cooperating teacher told me that, "Do not worry! There is always tomorrow. Always catch tomorrow. Keep on pushing tomorrow. You will be fine." Sometimes you need her.

From her story fragment, it can be intuited that Aaleyah shifted from an idealistic attitude to a comparatively realistic attitude with regards to students' different levels of reaction.

Moreover, Aaleyah garnered emotional support from her mentor teacher and became resilient in teaching. As Aaleyah summarized in her interview:

Sometimes, students are really unmotivated. It is not their fault. They come from different backgrounds. They are *kids*. They have conundrums affecting them both cognitively and emotionally. Whatever the case, tomorrow is a new day. Do not worry! You need to remember that, as a teacher, you have to keep up a positive attitude!

Aaleyah realized the complex and dynamic natures of the students, which will unavoidably affect her biology teaching. Sometimes, she needs to accept the students' unmotivated attitude in learning. These interactions with students facilitated Aaleyah to develop resilient dispositions necessary for profession-ready teachers.

Placement School

Most of the students in Aaleyah's placement school came from a lower socio-economic status. The students' demographic features (about 60% to 80% of African Americans and Hispanics/Latinos in) made Aaleyah realize that they have challenging lives and they do not have the optimum circumstances conducive to learning. Where lots of students were concerned, their parents usually did not response to Aaleyah when she called them. Aaleyah shared that there was almost no parental involvement in the students' schooling experiences, and she found that the students' parents were too busy earning a living and addressing their family members' basic needs. The milieu of the placement school prompted Aaleyah to reflect below:

You need to keep in mind that students come from different socio-economic states, different races, and different religions. You need to keep in mind that when you teach in the classroom, try to relate that to everybody, not just one.

The unsupportive parents unavoidably made Aaleyah's teaching practice overwhelming. Yet, this tough situation also gave Aaleyah an avenue to clearly understand the students' socio-cultural backgrounds.

Over the course of her teaching practicum, Aaleyah touched on the cultural influence of

the placement school. In sum, Aaleyah thought the placement school was a great place for biology learning, for Aaleyah found many stimulating opportunities to connect biology to students' daily lives. However, she could identify that the students in the placement school had less learning motivation and less-than-adequate knowledge backgrounds. Meanwhile, the teachers in the school did not have as high expectations of the students and perhaps did not push them enough:

I feel they did not push the students enough. They did not push the students to be the best they can be...If they are capable of doing higher level work, they should be pushed to the best they can be.

School District Policy

Aaleyah taught in a large urban school district located in the southwestern region of the U.S. Amid her four-month teaching, Aaleyah also felt that the policy climate of the local school district imposed on her, especially where the state-standardized tests were concerned. Situated in this educational environment bombarded by more and more standardized tests, Aaleyah poignantly shared her professional experience:

I feel the STARR tests are one of the things that make teachers hate teaching because they make teachers feel pressured. I think you have to remember that teaching is more than just tests. You need to remember that you not just teach them biology, you teach them how to be a better thinker, a better student, and cope with problems. There are more to teach than the materials. Therefore, you cannot focus your whole classroom teaching on the tests. If you teach well, students will automatically do well in the tests.

Aaleyah's succinct narrative persuasively captures her critical stance toward testing and the drill and practice approach to teaching. Aaleyah concurred that teaching should not narrowly focus on test preparation. Instead, teaching should encompass "how to be a better thinker, a better student, and cope with problems." More specifically, Aaleyah thought that teaching should be *relevant* to students' lives. Where this aspect is concerned, Aaleyah shared

below:

Lots of time, when students ask me why biology is important, why do I have to learn science when I want to be a football player. I will always try to relate to their life. Relevancy is very important. It is not only about science, it is about comparison and thinking, whether or not you want to become a foot player.

Aaleyah's view is that teaching is not merely a process of knowledge transmission. It involves more than mutual understanding and moving past what students know right now. Although the students are not interested in the science materials, teachers can plant the idea that they are still important as a medium for the development of more advanced thinking abilities (e.g., comparison and thinking).

By broadening and burrowing into her teaching philosophy in the three-dimensional inquiry space, it can be concluded that Aaleyah cultivated a relational and critical stance toward science pedagogies. This teaching philosophy further contributed to her *inquiry-oriented professional identity* as it changed and was being changed on her professional knowledge landscape.

Funds of Knowledge

Aaleyah posits that it is important to relate the biology knowledge to students' lives and their thinking ability. Thus, a related question is how Aaleyah utilizes students' background knowledge, such as their funds of knowledge (González, Moll, & Amanti, 2006). For this aspect of teaching, Aaleyah shared an appealing example on how to teach HIV, one abstract biology concept, to her students:

For example, the students may not know what HIV is. Everybody will be sick. I asked: How many of you have been sick before? How many of you see the doctor when you have a virus? Did your doctor give you any antibiotics? No? Why not? Why did you doctoral tell you that you need to get a rest? Every student can be related to sickness. It not if you are poor, you are sick; if you are rich, you are sick. Everyone can be related to

being sick. HIV transfers disease. These thing students hear about. Everyone watches TV. You bring these things. These things connect to every student with all backgrounds. It is not geared toward one. It is not only poor students get HIV or rich students get HIV. Every background, race, and religion can get HIV. Why is virus relevant? Everyone will be sick and viruses affect them.

Aaleyah assumes that although HIV is an abstract biology term, almost every one of her students has experienced at least one kind of illness since childhood, which provides a portal to understand the elusive HIV concept. Acknowledging the affordance of the students' funds of knowledge, Aaleyah first introduced concrete examples related to sickness, such as antibiotics and disease transfer. Then, Aaleyah introduced more abstract concepts related to HIV in a spiral manner. Over the course of her teaching, Aaleyah did not teach the concept abstractly. Conversely, Aaleyah respected the high school students' cognitive processes (Vygotsky, 1978) and instructed them from more concrete cases to more advanced conceptualizations.

Relationship Building

During her student teaching period, Aaleyah admitted that it was vital yet problematic to build relationships with the students. At the same time, she found it challenging to create mutually supportive interactions with the students within such a short time frame (i.e., fourteen weeks):

It is not easy to build relationship with students [who] do not know you. And we only have fourteen weeks with them. Whatever relationship you built, it takes time. You cannot rush it. But you have fourteen weeks... They need to be comfortable with me. Thus, you know, students are not comfortable, they do not respond. They shut down instead of responding to you. This was hard.

Aaleyah realized that relationship is the foundation upon which to enact successful teaching. To understand the dynamics of the student-teacher relationship and in the act of

teaching, Aaleyah said that if students did not like her, they might not like her teaching style because they were not used to it: “Occasionally, when I pushed them to think critically, the students all pushed back and they refused to try it.

Thus, it is impossible for Aaleyah to achieve her teaching goal when confronting the unproductive student-teacher relationships. Sometimes, to counteract this unfulfilling student-teacher relationship and create more teachable moments, Aaleyah had to relate the biology knowledge more relevantly to students’ lives. In this way, Aaleyah can more effectively engage the students’ learning.

Coda

From Aaleyah’s perspective, the major problem in the placement school where she student taught was the teachers did not have high expectations on the students. Meanwhile, Aaleyah reflected that she felt nervous at the beginning of the teaching practicum because she had never been in front of a class of youths before. That was the first time that Aaleyah had taught so many students. However, by the end of the practicum, Aaleyah felt comfortable with the students. Aaleyah explicated one story associated with her teaching evaluation:

The last day before I left the placement school, I asked my students to give some feedback, for I want to know what the students like or not like me from the students’ perspective. Surprisingly, all of the feedback that I received were very positive.

The students’ positive comments facilitated Aaleyah’s professional identity construction and fostered her “best loved self”—teach students biology in a meaningful and relevant way to their daily lives. Furthermore, we can see that the emotional support that Aaleyah gained from her mentor teacher, the funds of knowledge that she drew upon during her biology teaching, and the influence of the placement school and the local educational policy all

collectively shaped and reshaped the construction of her professional identity.

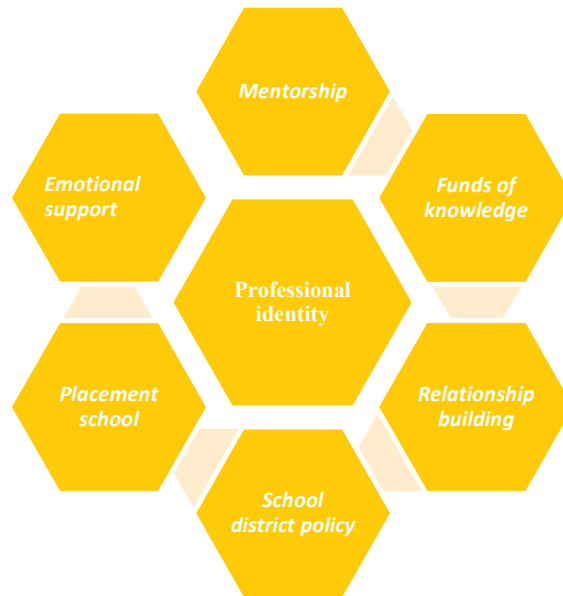


Figure 8: The major story threads underlying Aaleyah's professional identities

Francisco Garcia

Francisco Garcia explained that he decided to become a science teacher because he really enjoys teaching and believes that he can make a difference in kids' lives. Francisco Garcia assumed teaching would be a rewarding experience, since he could support adolescents' academic and social-emotional growth. Meanwhile, Francisco was fully aware that it was difficult to teach in urban high schools, and the salary there was not satisfactory in comparison to what members of other professions receive. However, Francisco Garcia clarified that he was young and did not have a family to support at that time. Consequently, salary was not a frustrating factor that detracted him from joining the teaching profession. However, Francisco assumed that salary would become a vital issue in the future. He

projected himself into the future: “I really care about teaching...If I have a family to support, things might become complicated. [For now], I am not really worried about that. I am young. For the salary, I think that is perfect for me.”

K-12 Schooling Experience

Francisco’s high school learning experience ignited his enthusiasm for science exploration. Francisco shared that his freshman biology class was interesting, and his teacher was very passionate about science teaching. He enjoyed that class, and his AP (Advancement Placement) biology class was fine as well. Overall, the biology teacher greatly sparked Francisco Garcia’s enthusiasm on science learning. He even admitted that “it was more about passion.” For this reason, Francisco Garcia planted the seeds of science during his high school period. In terms of his teaching philosophy about biology, Francisco Garcia said that he believes that every child has the opportunity to try on and experiment science and to know what it really means to be an authentic scientist.

Knowledge Communities

Over the course of his student teaching, Francisco formed multiple knowledge communities (Olson & Craig, 2009) with his colleagues where he continually authored his professional identities. Within these communities of knowing, Francisco shared ideas through conversations with his peers, and they supported each other’s professional growth. Francisco shared below:

We help each other on ideas because we work with these people throughout the entire program. So you know, you start with the same people. You end up with student teaching. Thus, a lot of people I am student teaching with, we have classes together. When you need help, there are always ideas from different team members. Every Tuesday, we shared teaching with the cohort members after Dr. Grossman’s class (pseudonym) (Preparation for Gifted Talented Students).

In retrospect, Francisco admitted the importance of these knowledge communities to his professional identity construction. Dr. Grossman's seminar also provided an avenue for Francisco to share ideas and how they felt, how teaching went every week, and what went well and poorly. They also discussed student improvement. Besides these seminars, Francisco also had a technology day in which each student teacher presented different ways of incorporating technology into their teaching. Francisco said that this technology day was inspiring and conducive to his professional development. All in all, Francisco illustrated that, "It is how we communicate with each other.... We have each other to support."

The Placement School

The high school—Willow Creek High School (pseudonym)—where Francisco taught is mainly populated by Hispanic students with the remainder of the student population mostly being African American, White, and Asian. Francisco taught five classes each week. One of the classes he taught had twenty males and eight females, most of whom were African Americans and Hispanics. Francisco admitted that his biology class was loud and disruptive, and he thought it was one of the most challenging classes that he had ever taught during the teaching practicum:

I teach five classes each week. One of the class that I taught are mostly African American, Hispanic students. There are twenty boys and eight girls in this class. The class is always loud. It is one of the roughest class that I have ever taught.

From his point of view, Francisco Garcia found that the school district environment where he taught was somewhat supportive once he began his student teaching. However, as her teaching practicum progressed, the thrusts of the cover story shaped part of the milieu where he resides over.

The school environment is very structured, and there is no room for

Anything[...]At my school, the standardized tests are big. They practice it for Two weeks. That's it!

According to Francis Garcia, the major problem was that the experienced teachers in Francisco's placement school did not receive much support in teaching. The teachers in the placement schools could not receive timely professional development opportunities when they wanted to experiment with innovative instructional methods. Another problem was that the school environment was very regimented and bureaucratic. According to Francisco, there was no room for trying anything new in teaching. Each time when he had a great idea, there was no opportunity to try it in his classroom. Francisco noted that the teachers in the field placement persistently had a very strict schedule and an unrealistic grading policy. Thus, the kids in the placement school had to take three tests each week. Consequently, there was heavy pressure on the teachers. Third, the school did not provide much support for the kids, especially for those struggling in science learning. Therefore, the teachers found it challenging to encourage the students to make due academic progress.

Francisco also said that the biology department was a well-suited department for him, and the teachers within the department could come up with wonderful ideas. Yet, the downside is that the teachers always complained about the kids and often complained how challenging the students were in the school. Francisco realized that the toughest problem was that the students did not have the basic knowledge in biology. As a result, they could not really move on in learning:

They want the kids to move from step one to step five without providing step two to four. It is a big problem! Kids will not learn. There is no way. Thus, I did the teaching differently. I introduced the basic concepts in biology first. After the students learned the concepts, then we moved to the next place.

Over the course of her student teaching, Francisco realized that cover story taking place in his placement school was the students did not have adequate knowledge and skills required for a more advance level. Because of this reason, the teachers always found the students struggling in learning. However, to combat this cover story, Francisco Garcia differentiated his biology instruction—to more suit the students’ authentic cognitive level. In this way, Francisco Garcia helped the students make up the biology knowledge.

The Influence of Mentorship

Regarding his mentor teacher, Francisco said the she always had amazing ideas. The mentor teacher always supported Francisco’s different styles of biology teaching. Rather than following other biology teachers in the placement school, Francisco taught differently and found it worked well for the kids’ learning. After learning the fact that the students lack basic understanding about biology concepts, Francisco emphasized the knowledge base for biology learning. In this way, he changed the classroom a lot more with his mentor teacher. Gradually, Francisco’s mentor teacher became more supportive and often asked, “What can I do today? Let’s try this.” For the reason of this change, Francisco explained that:

Francisco: The number one reason is I was open to work with her. Let’s try your [teaching method] one day. I do your way one day. The other days I have to try my way. My way did work. The students get their knowledge which they needed. The mentor teacher said it worked. This is the opportunity to remind me that I could make a difference in students’ learning. This is the strategy that I will not forget.

However, although the mentor teacher was supportive, Francisco felt that the rigid climate of the field placement stifled the students’ and the teachers’ creativity:

Because they are afraid of taking risks. They feel like if they try something new, there is no time to finish the course materials. There is no time for the students to finish the tests. We do a little bit of teaching. It is about balance. We try to do the best we can.

As manifested in Francisco's narrative, there is a discrepancy between what the teachers really aimed to achieve and what the field placement demanded. The teachers, as well as Francisco Garcia realized the necessity of creative pedagogies, which require a degree of teacher autonomy. However, to finish the designated learning goal, the placement school had to prioritize the coverage of the course materials, which left teacher limited opportunities to try differentiated instruction or other teaching methods they deemed appropriate.

The Local Educational Policy

When talking about other challenges in his teaching, such as standardized tests and teacher evaluation pressure, Francisco acknowledge that at his placement school, the standardized test was a big issue, and the teachers were required to practice it every two weeks. At the end of each semester, there was a course exam for biology and every freshman had to pass the test in order to advance to the next stage. Meanwhile, every student needed to pass the state test on biology. Therefore, teachers in that school felt pressured that the kids had to pass [the tests]. Francisco was without exception. He elucidated below:

The tests are slightly challenging because the kids did not meet the lower level of biology knowledge. For this reason, the teachers cannot bring the kids to that level [in a short time]. The trick thing is If teacher do not bring them to that level, the students will not pass the test.

As seen illustrated from Francisco's teaching story, the imposed burden of standardized tests and the students' struggling learning situation rendered his student teaching challenging.

Although he made some changes in his own instructional practice, Francisco still felt the obstacle to the teaching he cherished (i.e., differentiated instruction, creative teaching). This negative milieu, contradictory to his teaching philosophy that he shared earlier in this

dissertation research, also hindered the formation of his emerging professional identity (i.e., trying to engage students in biology learning.)

The Influence of Evaluation

Like other student teachers, Francisco needed to finish the evaluations based on the effectiveness of his student teaching. Francisco was observed by his university supervisor once each week. There were quantitative evaluation forms that needed to be followed, which included how to engage students in lesson, how to check students' knowledge throughout the entire lesson, and classroom management skills. Meanwhile, the mentor teacher had to finish Francisco's teaching evaluation in the placement school, which encompasses enacting instructional strategies, creating classroom environment, and building relationships with students and colleagues. These two strands of the evaluations constitute the required student teaching assessment. Additionally, Francisco was supposed to create a research plan by the end of the student teaching semester, which included four research questions. Thus, the four categories would answer how well he had accomplished in his teaching performance during the practicum period.

The university supervisor would also finish another part of Francisco's teaching evaluation. These supervisors taught in the public schools for twenty years, and Francisco considered them instrumental for his professional development in the field placement:

They usually give you good feedback. They are positive about the feedback. For example, I know you did not do this. But next semester when you try this, you will do better. Overall, the supervisor offers very constructive feedback...A lot of times something goes wrong. But they tell me that next time you can improve this and improve that. And it always keeps up your role. What is your goal for next week? They make you stay on the right track.

With the aid of the university supervisor and the mentor teacher, Francisco indicated

that he could show his supervisor and mentor teacher what he was going to do next week, what he would emphasize next week, and the instructional goal that he had made. He could also inform his mentor teacher that he had implemented the goal the entire week. When the supervisor would evaluate his teaching one day, Francisco would ask her, “Did you check the goal that I made?”

Apart from the aforementioned evaluation experience, the university supervisor reviewed Francisco’s lesson plans to give him timely guidance. The supervisor also gave him the feedback and told him what changes needed to be made or how to ask more probing questions. Francisco’s mentor teacher did the same thing as his university supervisor. If he missed something, the mentor teacher would add it to the content areas that Francisco would teach in the field placement.

Coda

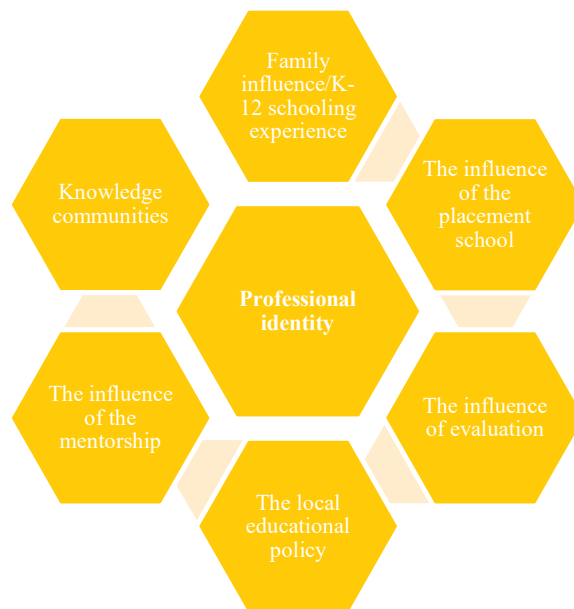


Figure 9: The major story threads underlying Francisco’s professional identities

Growing up in a family steeped in the field of education and further inspired by his high school AP teacher, Francisco Garcia naturally cultivated his passion for science

education. In order to make a difference in students' lives, Francisco Garcia chose the Next Generation STEM Program without considering utilitarian factors such as salary and the prestige of the teaching profession. Over the course of the student teaching, the cooperating teacher was emotionally and pedagogically supportive. However, due to the excessive external pressure of the state standardized tests and the students' struggling learning situations, it was challenging for Francisco Garcia to meet the state requirements and experiment with new teaching methods. To help students make satisfactory progress toward a more advanced level, Francisco Garcia emphasized teaching students' basic conceptual knowledge and skills in biology. In this way, Francisco developed his professional identity in a restrictive school environment. The major thrust of the story plotlines underlying Francisco Garcia's "stories to live by" during the practicum period are summarized in Figure 8.

CHAPTER VI

DISCUSSIONS

Using the analytical tools of broadening, burrowing, and storying and re-storying and Clandinin and Connelly's (2000) three-dimensional space narrative structure (i.e., interaction, continuity, and situation), this dissertation identified the four participants' "stories to live by" (Connelly & Clandinin, 1999)—the narrative approach to understanding their dynamic and evolving professional identities amid the program learning phase and learning-to-teach stage. Overall, this dissertation reveals that teacher professional identity construction entails a dual loop interplay between inward journey and outward journey simultaneously. The inward journey involves continually making sense of one's roles, responsibilities, and images in the professional workplaces. The outward journey involves the continual interactions with a multitude of contexts (e.g., the school district policy and evaluation policy) and the related stakeholders (e.g., mentor teachers and university supervisors).

Additionally, the author found that the participants expressed the construction of their professional identity through multiple "Discourses," which encapsulate the participants' various trajectories regarding the professional identity formation. In this study, both Hui Yuan and Ding Yang touched on the hierarchical power relationship Discourse embedded in their mentorships during the practicum contexts. Hui Yuan's Discourses center on the micropolitical influence of the placement on her professional identity formation, which constitutes the somewhat uncertainty of her teaching practice. Hui Yuan's Discourses also touch on the reality shock she was entrapped and the dynamic change of her teaching emotionality. Also, Ding Yang utilized metaphoric Discourse "farmer" to elucidate the theory

and practice divide and conundrum that she encountered during the practicum context. Ding Yang's Discourse also reflects the missing dialogue between her university supervisor and cooperating teacher. All these Discourses contribute to their multiple ways of knowing, doing, and being.

In the analysis of the story constellations, three significant themes arose: (1) The American participants clearly remember the "critical events" that led them to choose science and science education. In contrast to their American counterparts, the Chinese participants exclusively considered their family's financial situations, parents' advice, and the gendered stereotype when they chose the teacher education program. The Chinese participants normally considered the teaching job as stable and well-paid with guaranteed holidays. (2) The American participants focused more on the intrinsic motivations and attitudes toward science learning (e.g., the interest in science exploration). However, the Chinese participants had more utilitarian motivations to subject learning (e.g., the job benefits). (3) During their program learning phase, the American participants accumulated more inquiry-based, hands-on, and interactive learning experiences through many professional development opportunities. On the contrary, the Chinese participants mainly focused on the course guidelines and textbooks, which offered them fewer professional development opportunities.

Regarding the formation of the professional identity amid the learning to teach context, this dissertation reveals that, first, the contexts of the placement school exert great influences on student teachers' professional identity formation. Second, Chinese mentorship is more traditional and culturally imbued, which may not empower student teachers to try new teaching methods. However, American mentor teachers usually adopt an innovative and

encouraging approach to supervising STs. Third, Chinese STs found that it was difficult to implement innovative and progressive teaching methods, such as group discussions, whereas the American participants developed more student-centered pedagogies which are tailored to students’ diverse needs.

By foregrounding the story constellations distilled from the four participants, I generated both the convergent and the divergent aspects of Chinese and American STs’ professional identity construction over the course of student teaching. In this chapter, I reflect backward on both the Chinese and American STs’ four aspects of convergence regarding their professional identity formation during the practicums (Table 4).

Table 4: The convergence of professional identity formation

Convergence of professional identity formation
Negotiation between <i>personal</i> and <i>professional</i> identities;
Reflection between <i>theory</i> and <i>practice</i> ;
Tension between <i>knowledge for teaching</i> and <i>teacher knowledge</i> ;
<i>Dilemmatic space</i> in student teaching;

These convergences, acting as the similar elements between both the eastern and western educational landscape, showcase the commonly-shared story plotlines underlying both the Chinese and American student teachers’ professional identity constructions in their learning-to-teach contexts.

Convergence of Professional Identity Formation

Negotiation Between Personal and Professional Identities

Both the Chinese and American STs negotiated their personal and professional identities throughout their practicums (Beijaard, Meijier, & Verloop, 2014). The negotiation entails the

balance between their professional role perceptions in the professional workplace and their personal role perceptions in their daily life. Both Hui Yuan and Ding Yang shared their negotiations between the personal (e.g. college students) and professional role identities (e.g. FTE preservice teachers) during the practicums. More specifically, both Hui Yuan and Ding Yang talked about how they acted as college students, student teachers, colleagues, and community members. Across the boundary of these different roles, Hui Yuan and Ding Yang developed their professional identities within multiple personal and professional relationships. Similarly, both Aaleyah Baran and Francisco Garcia clearly understand the boundary between their personal roles (e.g. minority students with different cultural backgrounds) and professional roles (e.g. high school biology student teachers).

Reflection Between Theory and Practice

The Chinese and American STs reconciled the dynamics between theory and practice (Schön, 1987), which mainly encapsulates what they learned from the university-based teacher education coursework and the authentic classroom contexts. For Hui Yuan, the dynamics between theory and practice centered on how to make English language education more effective. Ding Yang reflected on how to initiate English language education in a more relational and humanitarian approach, which went beyond the mechanical vocabulary and grammar learning. Aaleyah Baran narrated how to make the biology learning more relevant to students' daily life by drawing upon students' funds of knowledge (e.g. Aaleyah narrated how to introduce the concept of HIV in a meaningful way more relevant to students' daily lives by incorporating illness, virus transmission, and seeing the doctor). Francisco Garcia shared how he taught the biology concepts more appropriate to student's authentic cognitive learning

level. More specifically, after realizing that the students did not have an adequate knowledge base in biology, Francisco Garcia restructured the curriculum sequence and helped the students make up for the knowledge gaps. All these examples demonstrate that the participants endeavored to reconcile what they learned from the teacher education program and the diverse and complex classroom contexts.

Tensions Between Knowledge for Teaching and Teacher Knowledge

There is a tension between *knowledge for teaching* and *teacher knowledge* for all the Chinese and American STs' practical knowledge formation (Craig, You, & Oh, 2017). Specifically, the *knowledge for teaching* approaches assumes that experts design, test, and impart a set of knowledge to teachers that are deemed important and necessary. In stark contrast, *teacher knowledge* aims to understand teaching in teachers' own terms. Simultaneously, teachers form their own personal practical knowledge in their daily lives (Clandinin, 1996). Initially, the four student teachers talked about the vitality of the coursework they gained from their teacher education programs. However, they gradually understand and interpret their teaching practices and the accompanying contexts in their own terms—the burgeoning of teacher knowledge associated with their professional identities. As manifested in their teaching stories, there is a chasm between knowledge for teacher and teacher knowledge.

Dilemmatic Space in Student Teaching

A dilemmatic space is embedded in student teaching. Instead of viewing dilemmas as specific situations or events, Fransson and Grannäs (2013) considered dilemmas as ever-present in people's lives, and they conceptualized a dilemmatic space in the context of

teachers' work and lives. As Fransson and Grannäs (2013) stated:

Drawing on the theoretical underpinnings of the conceptual frame of dilemmatic space makes it possible to analyze certain aspects of teachers' everyday practice in relation to societal changes. Different kinds of political and administrative policy decisions alter norms, values, tasks, guidelines, obligations and relations and (may) also change the very notion of dilemmas. Likewise, societal transformation changes the relations, positions and boundaries of the dilemmas, which in turn renders some aspects of dilemma more or less intense. (p. 5-6)

Thus, dilemmatic space provides a fruitful lens through which we can frame student teachers' professional identities in multiple relationships. In this dissertation, all the participants encountered different types of dilemmatic space. Hui Yuan had to reconcile the relationship between theory and practice during student teaching. Ding Yang had to navigate her teaching while assuming other responsibilities in the field placements. Aaleyah Baran encountered the challenge of how to improve the students' expectations on learning and make the biology contents more relevant to the students' lives. Francisco Garcia faced the challenge of how to align his instructional approach to be pedagogically appropriate to the students' cognitive level.

Divergence of Professional Identity Formation

Apart from these convergences, five pairs of divergences surface when I extrapolated the differences regarding the Chinese and American STs' professional identity construction during the teaching practicums.

Table 5: The divergence of professional identity formation

Divergence of professional identity formation	
<i>Chinese STs</i>	<i>American STs</i>
<i>Utilitarian</i> purpose (e.g., financial situations, stable and well-paid jobs)	<i>Intrinsic</i> purpose (e.g., “critical events”, make changes, like children)
Program learning experience is traditional	Program learning experience is progressive
Mentorship is more <i>traditional</i> and <i>hierarchical</i> .	Mentorship is more <i>equal</i> and <i>democratic</i> .
Field placement contexts are micropolitical.	Field placement contexts are more related to the local school policy.
STs’ pedagogical approaches became more <i>traditional</i> and <i>realistic</i> .	STs’ pedagogical approaches are more <i>diverse</i> and <i>flexible</i> .

Intrinsic/Extrinsic Motivations for Teaching

The Chinese and American STs have divergent motivations to the teaching profession. American participants had intrinsic motivations and attitudes toward science learning and teacher identity. Aaleyah Baran and Francisco Garcia were passionate about teaching, and they wanted to make differences in students’ lives. However, the Chinese participants had more utilitarian motivations to becoming teachers. Both Yuan Hui and Ding Yang considered the possibility of being accepted by the prestigious university, salary, and the holidays.

While storying their motivation to the teaching profession, the American participants clearly remember the “critical events” that led them to choose science and science education.

These “critical events” include science summer camps—EMSI (Engineering, Math and Science Institute) in Texas (Aaleyah Baran’s case), the encouragement from their middle and high school teachers (Francisco Garcia’s case). Similarly, the Chinese participants chose math and English language due to their high academic performance in these subjects.

Moreover, different from their American counterparts, the Chinese participants considered their families’ financial situations, parents’ advice, and the gendered teaching profession (The teaching job is stable and well-paid with guaranteed holidays) when they chose the teacher education program. However, both the Chinese and the American participants shared the financial incentives associated with their programs.

Different Program Learning Experiences

The cumulative influences of the teacher education program are different. During their program learning phase, the American participants accumulated more inquiry-based, hands-on, and interactive learning experiences. On the contrary, the Chinese participants mainly focused on the course guidelines and textbooks, and they had fewer professional development opportunities. For this point, Aaleyah Baran shared that she had been to the Noyce Summit in Washington, D.C. and the Texas Science Teachers Association Annual Conference.

Additionally, Aaleyah Baran attended the Noyce summer internship. She also participated in the Harris Bernard Science Camp. Aaleyah Baran acknowledged that all these participatory professional development activities were conducive to her smooth transition to science teaching, especially for her professional identity formation. It should be noted here that her teacher education program was a boutique science one sponsored by a major National Science Foundation grant and was not representative of commonplace teacher education

programs throughout America.

Different Field Placement Contexts

The contexts of the placement school exert great influences on both the Chinese and American STs' professional identity formation. Both the Chinese and the American participants addressed the influence of the placement school on their professional identity formation. More in depth, the Chinese participants more frequently addressed the micropolitical dimension of the student teaching. Both Ding Yang and Hui Yuan extensively elucidated the micropolitical influence of the respective field placements on their professional vulnerability—self-understandings when they were constantly exposed to a multitude of external dynamics at play in placement schools.

However, the American participants were more concerned about the politics of the local school district. Aaleyah talked about how some students were not motivated enough to learn science, and the teachers in the placement school had lower expectations on them. To combat this challenging context, Aaleyah made her teaching more relevant to students' funds of knowledge—the long-term accumulated daily experiences associated with their science learning. Francisco shared his “teacher-as-curriculum-maker” story, where he reorganized the contents of the biology curriculum and made the science knowledge more relevant to students' actual knowledge backgrounds.

Different Styles of Mentorship

The Chinese and American STs encountered different styles of mentorship. The Chinese mentorship is *traditional* in instructional guidance and *hierarchical* regarding the power relationship. The Chinese mentor teachers, most of whom were experienced teachers, usually

did not give the Chinese STs adequate opportunities to try new teaching methods or instructional models more suited the STs' preferences. Most of the time, the Chinese mentees emulated their mentors' teaching styles and rationales in designing lesson plans and implementing them. Therefore, in the Chinese educational context, the student teachers were expected to excel at traditional frontal teaching methods, and they were not introduced to a broad range of models of teaching, which were unquestionably introduced in the U.S. teacher education programs. In contrast, the American mentorship is more *progressive* in pedagogical guidance and *democratic* in power relationship. The American mentor teachers considered their mentees as "real teachers" rather than "student teachers," which favors the equal collegueship. Furthermore, the American mentor teachers usually encouraged their mentees to adopt innovative and new approaches to teaching.

Different Pedagogical Approaches

The Chinese STs' pedagogical approaches became more *traditional* and *realistic*, yet the American STs' pedagogical approaches are more *diverse* and *flexible*. After the practicum, the Chinese STs' teaching style is conventional and based on what has been passed down through the centuries whereas the American participants developed more student-centered pedagogies. The Chinese participants found that it was challenging of enact student-centered teaching method in the classroom. Finally, they had to adopt teacher-centered pedagogy. The American participants developed more student-centered teaching philosophy after their teaching practicum.

Furthermore, this dissertation pinpoints five tensions that form the participants' professional identity formation: (1) The tension between personal and professional identities.

(2) The tension between the participants' passions on their subjects (strong subject matter knowledge identity) and their enthusiasm on education. (3) The relationship between theory (university coursework) and practice (specific daily teaching practice): Teachers as curriculum-makers images instead of curriculum-implementers. (4) The tension between teacher-centered and student-centered pedagogies. (5) The tension between knowledge for teaching and teacher knowledge (Teacher as personal practical knowledge holder).

Summary

This chapter discussed both the convergent and divergent aspects of the Chinese and American STs' professional identity construction over the course of student teaching. Through sharing the participants' "stories to live by" amid the various field placements, the convergence of professional identity formation includes 1) negotiation between personal and professional identities, 2) reflection between theory and practice, 3) the tension between curriculum-implementers and curriculum-makers, and 4) the dilemmatic space in student teaching. The divergence of professional identity encompasses: 1) the intrinsic/extrinsic motivations for teaching; 2) different program learning experiences; 3) different field placement contexts; 4) different styles of mentorship; and 5) different pedagogical approaches.

CHAPTER VII

SUMMARY AND FUTURE DIRECTIONS

Numerous studies have shown that teachers' professional identities greatly influence their motivations to teach, to career commitment, and resilience (e.g., Bullock, 2013; Hong, 2010; Meijer et al., 2014). Teachers with well-developed professional identities typically have high motivations and strong commitment to teaching (Day et al., 2006). Moreover, teachers' professional identities profoundly mediate their "well-being," pedagogical practices, and effectiveness in teaching (Friesen & Besley, 2013). Teachers' well-defined professional identities can help them navigate a broad range of complex teaching contexts, such as, value-added teacher evaluation and parental involvement. In this scenario, this dissertation contributes to newer international perspective on how Chinese student teachers shape and reshape their professional identities against the learning-to-teaching backdrops.

However, in contrast, American teachers with negative emotions are prone to burn out (Chang, 2009), and teachers with weak professional identity perceptions have an alarmingly 30% attrition rate (Hong, 2010; Ingersoll, 2003). This high teacher attrition rate enormously harms the stability and the quality of teacher workforce that the students receive in public schools. Further, the high teacher attrition rate harms students' academic achievement (Ronfeldt, Loeb, & Wyckoff, 2013). In summary, teacher professional identity has great importance on teacher education and students' academic performance globally. In accordance with the aforementioned statements, this dissertation has three-fold implications.

Narrative Inquiry As a Mode of Professional Development

Narrative inquiry works as a pedagogical medium for professional development and

creative space of praxis (Latta & Kim, 2009; 2011). Narrative inquiry can create a needed space that foster teachers' professional learning. Narrative inquiry into teaching and learning has significant implications for teacher education pedagogy. Narrative inquiry works as a pedagogical medium that invites teachers and students to look at their school experiences from multiple perspectives, helping each other to interrogate their assumptions and taken-for-granted ideas as well as question the disabling contexts of teaching and learning. Hence, narrative inquiry becomes an engaging site for constructing praxis (Clark & Medina, 2000), in which particular kinds of wakefulness (Clandinin, Pushor, & Orr, 2007) are required for educators to claim their praxis (Latta & Kim, 2010).

Story Constellations As Powerful Methods

In this dissertation, story constellations method provides a powerful lens through which teacher educators can strengthen western-eastern dialogues on effective ways of preparing preservice teachers. By comparing and contrasting American and Chinese student teachers' program learning and learning-to-teach experiences, teacher educations might better identify the affordance and constraints that associated with student teachers' identity socialization.

Furthermore, story constellations, as instrumental methods in organizing the four participants' student teaching experiences, are conducive to reciprocal learning between western and eastern teacher education. By displaying the paired narrative exemplars gleaned from the four participants in this dissertation, readers can glimpse into the contextual dynamics and the professional agency (Turnbull, 2005) that collectively contribute to the shaping and reshaping of their professional identities.

The Vitality of Teachers' Professional Identity

In addition to knowledge and competency, the construction of preservice teachers' professional identity is vital for their professional development. According to Bullough (1997), teacher identity "is of vital concern to teacher education; it is the basis of meaning making and decision making" (p. 21). Identity-based research is significant because it offers an ontological approach to learning, which examines "how learning changes who we are" (Wenger, 1998, p. 5). For this reason, it is necessary to integrate the construction of professional identity in teacher education programs.

After analyzing the trajectory of teacher education development, I found that there are three versions of teacher education. The first version (Teacher Education Version 1.0) is knowledge and skill-based teacher education. Within this behavioral oriented paradigm, teacher educators emphasize the transfer of knowledge and skills deemed important for preservice and in-service teachers. Overall, teacher education version 1.0 accords to the tenet of external prescription and the corresponding mechanical training. The second version of teacher education (Teacher Education Version 2.0) is competence-based teacher education. Within this constructivism-oriented paradigm, teacher educators highlight the interactions of person and context, which is the major difference from the teacher education version 2.0.

The third version of teacher education is identity-mediated teacher education (Teacher Education Version 3.0). Related to competence-based teacher education, identity-mediated teacher education foreground teachers' coherent development from the lens of professional identity. In addition to the development of teachers' knowledge, skills, and competency, this paradigm also underscores teachers' inner meaning-making—what teachers bring to their

professional knowledge landscape.

The Reform of Student Teaching

Albeit the importance of student teaching is internationally acknowledged, there are still some institutional, structural, and epistemological problems pertaining to student teaching (Valencia, Martin, Place, & Grossman, 2009). The four participants' practicum experiences in this dissertation sheds lights on how to more effectively design, arrange, and evaluate student teaching. This dissertation specified four major glitches throughout the student teaching: (1) how to facilitate the cooperation between mentor teachers and university supervisors; (2) how to create more supportive places, such as knowledge communities, that are conducive to student teachers' professional development; (3) how to effectively cope with the constraints of the local educational policy in teaching, and (4) how to strengthen the coherence between university coursework and the diverse educational contexts.

There are a series of structure problems pertaining to student teaching that surface in this dissertation: 1) discrepant goals for student teaching, 2) strained interactions within the triad, 3) tenuous ties between coursework and fieldwork and 4) unclear criteria for field placements. All these problems attest to the "complex interaction in student teaching" (Valencia, Martin, Place, & Grossman, 2009). Inspired by this dissertation, university instructors, teacher educators, mentor teachers, and policy makers can forge collective capacities to tackle the problems stated above. It will be necessary to articulate the inherent tensions among the multiple roles each member plays and the need for each stakeholder to actively participate in this endeavor. In this way, student teachers can form solid professional identities by taking advantage of this critical development stage.

Limitations and Future Directions

Although this dissertation makes some contributions to the research on student teachers' professional identity construction during the teaching practicums, it has two folded limitations. First, I did not spend long enough time observing and interviewing the participants. All the Chinese and American student teachers featured in this study spent three to four months on their teaching practicums. However, this short time frame did not give me sufficient time to explore the participants' dynamic professional identity construction within their respective professional knowledge landscapes. Second, the American participants in this dissertation are atypical. When I recruited the American student teachers for this dissertation, only one Arabic American student teacher and one Latino student teacher agreed to participate in this dissertation project. However, the majority of the preservice teacher workforce in the U.S. is White, heterosexual, and English speaking (Sleeter, 2001). Thus, the lack of White student teachers makes it challenging to extend the conclusion to more general American student teachers.

After acknowledging the limitations of this dissertation, I proposed two aspects of the future research directions. First, I would like to conduct a longitudinal study on student teachers' professional identity construction from the student teaching period to the first-year teaching period. Since professional identity is interactive, and it evolves across times and places (Beijaard, Meijer & Verloop, 2004), it is necessary to systematically how the student teachers construct and reconstruct their professional identities against the different backdrops. Furthermore, the transition from preservice teachers to student teachers and then to novice teachers always entail the transformative perceptions of their roles, responsibilities, and images.

Accordingly, this period is replete with numerous affordances and restrains regarding professional identities. Second, I would incorporate more Chinese and American participants in this study, especially more general American participants. Since most of American teachers are White and middle class, I will select more White-American student teachers for the future research direction. Additionally, I will consider the influence of various subject matters on student teachers' professional identities construction. Within this in mind, I will diversify the participants with different subject backgrounds.

REFERENCES

- Akkerman, S. F., & Meijer, P. C. (2011). A dialogical approach to conceptualizing teacher identity. *Teaching and teacher education*, 27(2), 308-319.
- Argyris, C., & Schon, D. (1974). *Theory in practice: Increasing professional effectiveness*. San Francisco: CA: Jossey-Bass.
- Argyris, C., & Schon, D. (1978). *Organizational learning: A theory of action perspective*. Reading, MA: Addison Wesley.
- Beauchamp, C., & Thomas, L. (2010). Reflecting on an ideal: Student teachers envision a future identity. *Reflective Practice*, 11(5), 631-643.
- Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and teacher education*, 20(2), 107-128.
- Berliner, D. C. (2006). Our impoverished view of educational reform. *Teachers College Record*, 108(6).
- Ben-Peretz, M. (2011). Teacher knowledge: What is it? How do we uncover it? What are its implications for schooling? *Teaching and teacher Education*, 27(1), 3-9.
- Ben-Peretz, M., & Craig, C. J. (2017). Intergenerational impact of a curriculum enigma: the scholarly legacy of Joseph J. Schwab. *Educational Studies*, 1-28.
- Bischoff, P., French, P., & Schaumloffel, J. (2014). Reflective pathways: Analysis of an urban science teaching field experience on Noyce scholar science education awardees' decisions to teach science in a high-need New York City School. *School Science and Mathematics*, 114(1), 40-49.
- Bowe, A., Braam, M., Lawrenz, F., & Kirchhoff, A. (2011). Comparison of alternative and

- traditional teacher certification programs in terms of effectiveness in encouraging STEM pre-service teachers to teach in high need schools. *Journal of the national association for alternative certification*, 6(1), 26-45.
- Brophy, J. (Ed.). (2002). *Social constructivist teaching: Affordances and constraints*. Emerald Group Publishing Limited.
- Cheng, M. M., Chan, K. W., Tang, S. Y., & Cheng, A. Y. (2009). Pre-service teacher education students' epistemological beliefs and their conceptions of teaching. *Teaching and Teacher Education*, 25(2), 19-327.
- Choy, D., Wong, A. F., Goh, K. C., & Ling Low, E. (2014). Practicum experience: Pre-service teachers' self-perception of their professional growth. *Innovations in Education and Teaching International*, 51(5), 472-482.
- Chu, H. (2009). Integrating urban and rural education: system reconstruction and institutional innovation-the dualistic education structure in China and its declassification. *Educational Research*, 11.3-10, (in Chinese).
- Clandinin, D. J. (1985). Personal practical knowledge: A study of teachers' classroom images. *Curriculum inquiry*, 15(4), 361-385.
- Clandinin, D. J. (1986). *Classroom practice: Teacher images in action*. Philadelphia: The Falmer Press.
- Clandinin, D. J., & Connelly, F. M. (1986). Rhythms in teaching: The narrative study of teachers' personal practical knowledge of classrooms. *Teaching and teacher education*, 2(4), 377-387.
- Clandinin, D. J., & Connelly, F. M. (2000). *Narrative inquiry: Experience and story in*

qualitative research.

- Clandinin, D. J., Downey, C. A., & Huber, J. (2009). Attending to changing landscapes: Shaping the interwoven identities of teachers and teacher educators. *Asia-Pacific journal of teacher education*, 37(2), 141-154.
- Clarke, A., Triggs, V., & Nielsen, W. (2014). Cooperating teacher participation in teacher education: A review of the literature. *Review of Educational Research*, 84(2), 163-202.
- Cochran-Smith, M., Baker, M., Burton, S., Chang, W. C., Cummings Carney, M., Fernández, M. B., ... & Sánchez, J. G. (2017). The accountability era in US teacher education: looking back, looking forward. *European Journal of Teacher Education*, 40(5), 572-588.
- Cochran-Smith, M., & Lytle, S. L. (Eds.). (1993). *Inside/outside: Teacher research and knowledge*. Teachers College Press.
- Connelly, F. M., Clandinin, D. J., & He, M. F. (1997). Teachers' personal practical knowledge on the professional knowledge landscape. *Teaching and teacher education*, 13(7), 665-674.
- Connelly, F. M., & Clandinin, D. J. (1999). *Shaping a professional identity: Stories of educational practice*. Teachers College Press.
- Craig, C. J. (1995). Knowledge communities: A way of making sense of how beginning teachers come to know in their professional knowledge contexts. *Curriculum Inquiry*, 25(2), 151-175.
- Craig, C. J. (1997). Telling stories: A way to access beginning teachers' knowledge. *Teaching Education*, 9, 61-68.

- Craig, C. J. (1999). Parallel stories: A way of contextualizing teacher knowledge. *Teaching and Teacher Education*, 15(4), 397-411.
- Craig, C. J. (2007). Story constellations: A narrative approach to contextualizing teachers' knowledge of school reform. *Teaching and Teacher Education*, 23(2), 173-188.
- Craig, C. (2012). Professional development through a teacher-as-curriculum maker lens. *Teacher learning that matters*, 100-112.
- Craig, C. J. (2013). Teacher education and the best-loved self. *Asia Pacific Journal of Education*, 33(3), 261-272.
- Craig, C., & Olson, M. (2002). The development of teachers' narrative authority in knowledge communities: A narrative approach to teacher learning. In N. Lyons & V. LaBoskey (Eds.), *Narrative inquiry in practice: Advancing the knowledge of teaching* (pp.115-129). New York, NY: Teachers College Press.
- Craig, C. J., & Ross, V. (2008). Cultivating the image of teachers as curriculum makers. *The Sage handbook of curriculum and instruction*, 282-305.
- Craig, C. J., You, J., & Oh, S. (2015). Pedagogy through the pearl metaphor: teaching as a process of ongoing refinement. *Journal of Curriculum Studies*, 1-29.
- Craig, C. J., You, J., Zou, Y., Verma, R., Stokes, D., Evans, P., & Curtis, G. (2018). The embodied nature of narrative knowledge: A cross-study analysis of embodied knowledge in teaching, learning, and life. *Teaching and Teacher Education*, 71, 329-340.
- Craig, C. J., Zou, Y., & Curtis, G. (2017). The developing knowledge and identity of an Asian-American teacher: The influence of a China study abroad experience. *Learning*,

Culture and Social Interaction. doi:10.1016/j.lcsi.2017.09.002.

Craig, C. J., Zou, Y., & Poimbeauf, R. P. (2015). A narrative inquiry into schooling in China:

three images of the principalship. *Journal of Curriculum Studies*, 47(1), 141-169.

Darling-Hammond, L. (2000). How teacher education matters. *Journal of teacher*

education, 51(3), 166-173.

Darling-Hammond, L. (2015). *The flat world and education: How America's commitment to*

equity will determine our future. Teachers College Press.

Darling-Hammond, L., & Bransford, J. (Eds.). (2007). *Preparing teachers for a changing*

world: What teachers should learn and be able to do. John Wiley & Sons.

DuFour, R. (2004). What is a "professional learning community"? *Educational*

leadership, 61(8), 6-11.

Elbaz, F. (1983). *Teacher thinking: A study of practical knowledge*. London, UK: Croom

Helm.

Fransson, G., & Grannäs, J. (2013). Dilemmatic spaces in educational contexts—towards a

conceptual framework for dilemmas in teachers work. *Teachers and Teaching*, 19(1), 4-

17.

Friedman, T. L. (2005). *The world is flat: A brief history of the twenty-first century*.

Macmillan.

Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice*. New York,

NY: Teachers College Press.

Gee, J. (2011). *How to Do Discourse Analysis: A Toolkit*. New York, NY: Routledge.

Gholami, K. (2011). Moral care and caring pedagogy: two dimensions of teachers'

- praxis. *Pedagogy, Culture & Society*, 19(1), 133-151.
- González, N., Moll, L. C., & Amanti, C. (Eds.). (2006). *Funds of knowledge: Theorizing practices in households, communities, and classrooms*. Routledge.
- Grossman, P. (2008). Responding to our critics: From crisis to opportunity in research on teacher education. *Journal of Teacher Education*, 59(1), 10-23.
- Grossman, P., Compton, C., Igra, D., Ronfeldt, M., Shahan, E., & Williamson, P. (2009). Teaching practice: A cross-professional perspective. *Teachers College Record*, 111(9), 2055-2100.
- Grossman, P., Hammerness, K., & McDonald, M. (2009). Redefining teaching, re-imagining teacher education. *Teachers and Teaching: theory and practice*, 15(2), 273-289.
- Grudnoff, L. (2011). Rethinking the practicum: Limitations and possibilities. *Asia-Pacific Journal of Teacher Education*, 39(3), 223-234.
- Gu, M. (2006). An analysis of the impact of traditional Chinese culture on Chinese education. *Frontiers of Education in China*, 1(2), 169-190.
- Hamman, D., Gosselin, K., Romano, J., & Bunuan, R. (2010). Using possible-selves theory to understand the identity development of new teachers. *Teaching and teacher education*, 26(7), 1349-1361.
- Han, I., Shin, W. S., & Ko, Y. (2017). The effect of student teaching experience and teacher beliefs on pre-service teachers' self-efficacy and intention to use technology in teaching. *Teachers and Teaching*, 23(7), 829-842.
- Hargreaves, A., & Fullan, M. (2012). *Professional capital: Transforming teaching in every school*. New York City, NY: Teachers College Press.

- Hargreaves, A., & Shirley, D. L. (Eds.). (2009). *The fourth way: The inspiring future for educational change*. Thousand Oaks, CA: Corwin.
- Hill, H. C., Rowan, B., & Ball, D. L. (2005). Effects of teachers' mathematical knowledge for teaching on student achievement. *American educational research journal*, 42(2), 371-406.
- Hinchion, C., & Hall, K. (2016). The uncertainty and fragility of learning to teach: a Britzmanian lens on a student teacher story. *Cambridge Journal of Education*, 46(4), 417-433.
- Hong, J. Y. (2010). Pre-service and beginning teachers' professional identity and its relation to dropping out of the profession. *Teaching and teacher Education*, 26(8), 1530-1543.
- Hu, Y. (2007). A consideration on implementing the system of free normal education. *Journal of Shanxi Normal University*, 36(6), 100-104, (in Chinese).
- Izadinia, M. (2013). A review of research on student teachers' professional identity. *British Educational Research Journal*, 39(4), 694-713.
- Izadinia, M. (2016). Preservice teachers' professional identity development and the role of mentor teachers. *International Journal of Mentoring and Coaching in Education*, 5(2), 127-143.
- Izadinia, M. (2016). An investigation into mentor teacher-preservice teacher relationship and its contribution to development of preservice teachers' professional identity. Unpublished dissertation Edith Cowan University, Australia.
- Jordan, M. E., Kleinsasser, R. C., & Roe, M. F. (2014). Wicked problems: inescapable wickedness. *Journal of Education for Teaching*, 40(4), 415-430.

- Kim, J. H., & Latta, M. M. (2009). Narrative inquiry: Seeking relations as modes of interactions. *The Journal of Educational Research*, 103(2), 69-71.
- Kirchhoff, A., & Lawrenz, F. (2011). The use of grounded theory to investigate the role of teacher education on STEM teachers' career paths in high-need schools. *Journal of Teacher Education*, 62(3), 246-259.
- Koc, I. (2012). Preservice science teachers reflect on their practicum experiences. *Educational Studies*, 38(1), 31-38.
- Ladson-Billings, G. (2009). *The dreamkeepers: Successful teachers of African American children*. John Wiley & Sons.
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: aka the remix. *Harvard Educational Review*, 84(1), 74-84.
- Lamote, C., & Engels, N. (2010). The development of student teachers' professional identity. *European Journal of Teacher Education*, 33(1), 3-18.
- Latta, M. M., & Kim, J. H. (2009). Narrative inquiry invites professional development: Educators claim the creative space of praxis. *The Journal of Educational Research*, 103(2), 137-148.
- Latta, M. M., & Kim, J. H. (2010). Narrative inquiry invites professional development: Educators claim the creative space of praxis. *The Journal of Educational Research*, 103 (3), 137-148.
- Latta, M. M., & Kim, J. H. (2011). Investing in the curricular lives of educators: Narrative inquiry as pedagogical medium. *Journal of Curriculum Studies*, 43(5), 679-695.
- Lawson, T., Çakmak, M., Gündüz, M., & Busher, H. (2015). Research on teaching

practicum—a systematic review. *European journal of teacher education*, 38(3), 392-407.

Lesley, M. K., Hamman, D., Olivarez, A., Button, K., & Griffith, R. (2009). “I’m prepared for anything now”: Student teacher and cooperating teacher interaction as a critical factor in determining the preparation of “quality” elementary reading teachers. *The Teacher Educator*, 44(1), 40–55.

Li. Q., Huang. W., & Li. B. (2010). Empirical study of the balanced development of rural and urban compulsory education: a case in Guangzhou. *Shanghai Research on Education*, 10. 29-31, (in Chinese).

Liou, P. Y., & Lawrenz, F. (2011). Optimizing teacher preparation loan forgiveness programs: Variables related to perceived influence. *Science Education*, 95(1), 121-144.

Liu, Y., & Xu, Y. (2011). Inclusion or exclusion? A narrative inquiry of a language teacher’s identity experience in the ‘new work order’ of competing pedagogies. *Teaching and Teacher Education*, 27(3), 589-597.

Lyons, N., & LaBoskey, V. K. (Eds.). (2002). *Narrative inquiry in practice: Advancing the knowledge of teaching* (Vol. 22). Teachers College Press.

Martinie, S. L., Kim, J. H., & Abernathy, D. (2016). “Better to be a pessimist”: A narrative inquiry into mathematics teachers' experience of the transition to the Common Core. *The Journal of Educational Research*, 109(6), 658-665.

Mena, J., García, M., Clarke, A., & Barkatsas, A. (2016). An analysis of three different approaches to student teacher mentoring and their impact on knowledge generation in practicum settings. *European Journal of Teacher Education*, 39(1), 53-76.

- Mena, J., Hennissen, P., & Loughran, J. (2017). Developing pre-service teachers' professional knowledge of teaching: The influence of mentoring. *Teaching and Teacher Education, 66*, 47-59.
- Milner IV, H. R. (2013). Analyzing poverty, learning, and teaching through a critical race theory lens. *Review of Research in Education, 37*(1), 1-53.
- Mishler, E. (1990). Validation in inquiry-guided research: The role of exemplars in narrative studies. *Harvard educational review, 60*(4), 415-443.
- Mishler, E. (2009). *Storylines: Craft artists' narratives of identity*. Cambridge, MA: Harvard University Press.
- Morrell, P. D., & Salomone, S. (2017). Impact of a Robert Noyce Scholarship on STEM teacher recruitment. *Journal of College Science Teaching, 47*(2), 16-21.
- Olson, M. R., & Craig, C. J. (2009). Small” stories and mega-narratives: Accountability in balance. *Teachers College Record, 111*(2), 547-572.
- Paine, L. (1990). The teacher as virtuoso: A Chinese model for teaching. *The Teachers College Record, 92*(1), 49-81.
- Paine, L. W., & Fang, Y. (2006). Reform as hybrid model of teaching and teacher development in China. *International Journal of Educational Research, 45*(4-5), 279-289.
- Phillion, J., & Connelly, F. M. (2004). Narrative, diversity, and teacher education. *Teaching and Teacher Education, 20*(5), 457-471.
- Qian, X., & Smyth, R. (2008). Measuring regional inequality of education in China: widening coast–inland gap or widening rural–urban gap? *Journal of International*

Development, 20(2), 132-144.

Ravitch, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education*. New York City, NY: Basic Books.

Ravitch, D. (2013). *Reign of error: The hoax of the privatization movement and the danger to America's public schools*. New York, NY: Knopf.

Sahlberg, P. (2014). *Finnish lessons 2.0: What can the world learn from educational change in Finland?* New York City, NY: Teachers College Press.

Schepens, A., Aelterman, A., & Vlerick, P. (2009). Student teachers' professional identity formation: between being born as a teacher and becoming one. *Educational Studies*, 35(4), 361-378.

Schneider, J. (2014). Rhetoric and practice in pre-service teacher education: the case of Teach For America. *Journal of Education Policy*, 29(4), 425-442.

Schultz, K., & Ravitch, S. M. (2012). Narratives of learning to teach taking on professional identities. *Journal of Teacher Education*. 64(1), 35-46.

Schwab, J. J. (1958). The teaching of science as inquiry. *Bulletin of the Atomic Scientists*, 14(9), 374-379.

Shi, X., & Englert, P. A. (2008). Reform of teacher education in China. *Journal of Education for Teaching*, 34(4), 347-359.

Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational researcher*, 15(2), 4-14.

Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard educational review*, 57(1), 1-23.

- Shulman, L. S. (2005). Signature pedagogies in the professions. *Daedalus*, 134(3), 52-59.
- Sleeter, C. E. (2001). Preparing teachers for culturally diverse schools: Research and the overwhelming presence of whiteness. *Journal of teacher education*, 52(2), 94-106.
- Sleeter, C. E., & Cornbleth, C. (2011). *Teaching with vision: Culturally responsive teaching in standards-based classrooms*. New York City, NY: Teachers College Press.
- Smith, E. R., & Avetisian, V. (2011). Learning to teach with two mentors: Revisiting the “two-worlds pitfall” in student teaching. *The Teacher Educator*, 46(4), 335-354.
- Smith, K., & Lev-Ari, L. (2005). The place of the practicum in pre-service teacher education: The voice of the students. *Asia-Pacific Journal of Teacher Education*, 33(3), 289-302.
- Standal, Ø. F., Moen, K. M., & Moe, V. F. (2014). Theory and practice in the context of practicum: The perspectives of Norwegian physical education student teachers. *European Physical Education Review*, 20(2), 165-178.
- Sun, J. (2007). Suggestions on policy design of free education for students in normal universities. *Educational Development Research*, 6, 21-26, (in Chinese).
- Tan, C. (2012). Re-discussing the teachers’ professionalization of moral education. *Educational Research*, (10), 39-46. (In Chinese)
- Tang, S. Y. F. (2003). Challenge and support: The dynamics of student teachers’ professional learning in the field experience. *Teaching and teacher education*, 19(5), 483-498.
- Tatto, M. T. (2006). Education reform and the global regulation of teachers’ education, development and work: A cross-cultural analysis. *International Journal of Educational Research*, 45(4-5), 231-241.
- Tatto, M. T., Burn, K., Menter, I., Mutton, T., & Thompson, I. (2017). *Learning to teach in*

England and the United States: The evolution of policy and practice. Routledge.

ten Dam, G. T., & Blom, S. (2006). Learning through participation. The potential of school-based teacher education for developing a professional identity. *Teaching and teacher education*, 22(6), 647-660.

Teng, F. (2017). Emotional development and construction of teacher identity: Narrative interactions about the preservice teachers' practicum experiences. *Australian Journal of Teacher Education*, 42(11), 117.

Ticknor, C. S., Gober, D., Howard, T., Shaw, K., & Mathis, L. A. (2017). The influence of the CSU Robert Noyce Teacher Scholarship program on undergraduates' teaching plans. *Georgia Educational Researcher*, 14(1), 69.

Timoštšuk, I., & Ugaste, A. (2010). Student teachers' professional identity. *Teaching and teacher Education*, 26(8), 1563-1570.

Timoštšuk, I., Kikas, E., & Normak, M. (2016). Student teachers' emotional teaching experiences in relation to different teaching methods. *Educational Studies*, 42(3), 269-286.

Trent, J. (2010). Teacher education as identity construction: Insights from action research. *Journal of Education for Teaching*, 36(2), 153-168.

Tsui, A. B., & Wong, J. L. (2010). In search of a third space: Teacher development in mainland China. In C. K. K. Chan & N. Rao (Eds.), *Revisiting the Chinese Learner: Changing Contexts, Changing Education* (pp. 281-311). Springer Netherlands.

Turnbull, M. (2005). Student teacher professional agency in the practicum. *Asia-Pacific Journal of Teacher Education*, 33(2), 195-208.

- Tyler, R. W. (1949/2013). *Basic principles of curriculum and instruction*. Chicago, IL: University of Chicago Press.
- Valencia, S. W., Martin, S. D., Place, N. A., & Grossman, P. (2009). Complex interactions in student teaching: Lost opportunities for learning. *Journal of Teacher Education*, 60(3), 304-322.
- Van den Kieboom, L. A., McNew-Birren, J., Eckman, E., & Silver-Thorn, M. B. (2013). Field experience as the centerpiece of an integrated model for STEM teacher preparation. *Teacher Education & Practice*. 26(2), 339-355.
- Vygotsky, L. S. (1962). *Language and thought*. Cambridge, MA: Massachusetts Institute of Technology Press,
- Walkington, J. (2005). Becoming a teacher: Encouraging development of teacher identity through reflective practice. *Asia-Pacific Journal of teacher education*, 33(1), 53-64.
- Wang, C. (2007). Analysis of teacher attrition. *Chinese Education & Society*, 40(5), 6-10.
- Wang, D., & Gao, M. (2013). Educational equality or social mobility: the value conflict between preservice teachers and the Free Teacher Education Program in China. *Teaching and teacher education*, 32, 66-74.
- Wang, F., & Clarke, A. (2014). The practicum experiences of English Language Major student teachers during a period of profound curriculum reform in China. *International Journal of Educational Development*, 36, 108-116.
- Wenger, E. (1998). *Community of practice*. Cambridge: Cambridge University Press.
- Yan, C., & He, C. (2010). Transforming the existing model of teaching practicum: A study of Chinese EFL student teachers' perceptions. *Journal of Education for Teaching*, 36(1),

57-73.

- Ye, W. (2016). When rural meets urban: the transfer problem Chinese pre-service teachers face in teaching practice. *Journal of Education for Teaching*, 42(1), 28-49.
- Ye, X., Sun, M., Liu, Y., Zhu, S., & Xiao, X. (2010). Investigation of studying status of free normal university students majoring in biology under the policy of free normal education. *Journal of Southwest China Normal University*, 35(2), 234e237, (in Chinese).
- Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race ethnicity and education*, 8(1), 69-91.
- Zeichner, K. (2002). Beyond traditional structures of student teaching. *Teacher Education Quarterly*, 29(2), 59-64.
- Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college-and university-based teacher education. *Journal of teacher education*, 61(1-2), 89-99.
- Zhong, Q. (2006). Curriculum reform in China: Challenges and reflections. *Frontiers of education in China*, 1(3), 370-382.
- Zhou, J. (2014). Teacher education changes in China: 1974–2014. *Journal of Education for Teaching*, 40(5), 507-523.

APPENDIX A

INTERVIEW PROTOCOL

FTE/Noyce Scholar student teachers' professional identity in practicum

1. Please introduce your personal background (origin of province/state, family background, K-12 schooling experiences).
2. What was your motivation into the FTE/Noyce Scholarship Program?
3. Could you please share one critical event that had great influence on your professional identity?
4. Please describe your placement school.
5. Please describe your cooperating teacher.
6. Could you please tell me your daily student teaching activities?
7. What are your main responsibilities in your student teaching?
8. How do you perceive your multiple professional identities in your student teaching?
9. What kind of supports have you got from student teaching? How do the supports impact your professional identities?
10. What kind of challenges have you got from student teaching? How do the challenges impact your professional identities?
11. How do your student teaching experiences impact your professional development as a preservice teacher?

APPENDIX B

IRB APPROVAL CERTIFICATE

DIVISION OF RESEARCH



APPROVAL OF RESEARCH

Using Expedited Procedures

April 20, 2017

Type of Review:	Submission Response for Initial Review Submission Form
Title:	Narrative inquiry of Chinese and American student teachers' professional identities in their teaching practicums: A story constellations approach
Investigator:	Cheryl Joyce Craig
IRB ID:	IRB2016-0764D
Reference Number:	046481
Funding:	
Documents Approved:	University Site Authorization Chinese version of consent form Revised Informed Consent Form Assurance Letter Revised Participant Recruitment (English) University Site Authorization Observation Rubric Revised Participant Recruitment (Chinese) Interview Protocol (English)

	Interview Protocol (Chinese)
Special Determinations:	Not Greater than Minimal Risk under 45 CFR 46 / 21 CFR 56
Review Category:	Category 6: Collection of data from voice, video, digital, or image recordings made for research purposes Category 7: Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies

Dear Cheryl Joyce Craig:

The IRB approved this research from 04/20/2017 to 04/15/2018 inclusive.

It is recommended that you submit your next continuing review by 03/15/2018 to avoid a lapse in approval. Your study approval will end on 04/15/2018.

Your study must maintain an approved status as long as you are interacting or intervening with living individuals or their identifiable private information or identifiable specimens. *Obtaining* identifiable private information or identifiable specimens includes, but is not limited to:

1. using, studying, or analyzing for research purposes identifiable private information or identifiable specimens that have been provided to investigators from any source; and
2. using, studying, or analyzing for research purposes identifiable private information or identifiable specimens that were already in the possession of the investigator.

In general, OHRP considers private information or specimens to be individually identifiable as defined at 45 CFR 46.102(f) when they can be linked to specific individuals by the investigator(s) either directly or indirectly through coding systems.

If you have any questions, please contact the IRB Administrative Office at 1-979-458-4067, toll free at 1-855-795-8636.

Sincerely,
IRB Administration

APPENDIX C

INFORMED CONSENT FORM

Research Title: Narrative inquiry of the Chinese and American student teachers' professional identities in teaching practicums: A story constellations approach

Principal Investigator: Cheryl Craig

Co-Investigator: Gang Zhu

Harrington Tower 402

Department of Teaching, Learning and Culture

College of Education and Human Development

Texas A&M University

Email: tamugz-2016@tamu.edu

Phone: 979-264-6796

Faculty advisor: Dr. Cheryl Craig

Email: cheryljcraig@tamu.edu

Investigator's Statement

I cordially invite you to work as a research participant in my project. The purpose of this informed consent form is to give you all the information you need to help you decide whether or not to engage in the study. Please read the form carefully. You may ask questions about the purpose of the research, what you are expected to do, the possible risks and benefits, your rights as a participant, and anything else about the research. When all your queries are answered, you can decide if you want to join in this study or not. This process is called "informed consent." I will give you a copy of this form for your records.

Purpose of the study

The purpose of this study is to provide better understandings of how Chinese and American student teachers (re)construct their professional identities in the practicums. I want to collect four sources of data: (a) What are the Chinese and American student teachers' motivations for entering into the monetary-incentive teacher education programs (the Free Teacher Education program and *teach*Houston program)? (b) How do the Chinese and American student teachers craft their professional identities within the milieus created by the teacher education programs and their placement schools? (c) What are the potential emotional and ethical tensions when the Chinese and American student teachers (re)construct their professional identities? (d) How do the reflective turns facilitate the formation of the Chinese and American student teachers' professional identities? The sources of the data in this study might include classroom observations and face-to-face interviews.

Procedures

This study is an international comparative research. If you choose to participate in this study, I would like to observe your classroom teaching and interview you three times

physically—at the beginning, middle and end of practicums respectively. Each interview will last about 30 minutes. I will mainly ask you questions about your student teaching experiences. For instance, I would ask you “How does your cooperative teacher interact with you during your student teaching?” “What kind of challenges have you encountered during the practicums?” With your permission, I would like to audio tape your interviews so that I can have an accurate record of our conversation based on which I will transcribe verbatim.

During my research, I will assign a pseudonym to you to protect your privacy. Meanwhile, the transcript will be sent to you electronically for your reference. The data will be stored in a password protected computer that only I can access to. After the research, I will keep the research data for at least three years.

Risk, stress or discomfort

Some people might feel that interviews or observations will harm their privacy. If participants are uncomfortable with specific questions, they can choose not to answer them. If they would like to withdraw from the study, they can do it any time they want. What’s more, my interview protocol and observation focus are designed under the guidance of my faculty advisor’s instruction, which will help participants feel more comfortable.

Benefits of the study

Many Chinese and American student teachers feel that it helpful to reflect on their student teaching in the lens of professional identities. Meanwhile, these reflective practicum experiences will facilitate them to be profession-ready teachers by bridging the theory and practice gap along their professional journeys.

Other information

Information about you will be kept confidential to the extent permitted or required by law. People who have access to your information include the Principal Investigator and research study personnel. Representatives of regulatory agencies such as the Office of Human Research Protections (OHRP) and entities such as the Texas A&M University Human Research Protection Program may access your records to make sure the study is being run correctly and that information is collected properly.

For questions about your rights as a research participant, to provide input regarding research, or if you have questions, complaints, or concerns about the research, you may call the Texas A&M University Human Research Protection Program office by phone at 1-979-458-4067, toll free at 1-855-795-8636, or by email at irb@tamu.edu.”

Participant signature: _____ Date: _____